

09/853367

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SYSTEM:OS - DIALOG OneSearch

File 65:Inside Conferences 1993-2004/May W2

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File 440:Current Contents Search(R) 1990-2004/May 11

(c) 2004 Inst for Sci Info

File 348:EUROPEAN PATENTS 1978-2004/May W01

(c) 2004 European Patent Office

File 357:Derwent Biotech Res. 1982-2004/May W2

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File 113:European R&D Database 1997

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\*File 113: This file is closed (no updates)

Set Items Description

Set	Items	Description
S1	370	(HYALURONIC OR HYALURONATE) AND GLUCURONIC
S2	167	S1 AND (TOXIN? ? OR TOXOID? ? OR CARRIER? ?)
S3	25	S2 AND EPITOPE? ?
S4	25	RD (unique items)

-key terms

>>>No matching display code(s) found in file(s): 65, 113

4/3,AB/1 (Item 1 from file: 348)

DIALOG(R)File 348:EUROPEAN PATENTS

(c) 2004 European Patent Office. All rts. reserv.

01726384

Antibody fragment-polymer conjugates and humanized anti-IL-8 monoclonal antibodies

Antikörperfragment-Polymarkonjugate und humanisierte monoklonale Antikörper gegen IL-8

Conjugues de fragments d'anticorps et des polymeres et des anticorps monoclonaux humanises contre l'IL-8

PATENT ASSIGNEE:

Genentech, Inc., (4538310), Legal Department, 1 DNA Way, South San Francisco, CA 94080-4990, (US), (Applicant designated States: all)

INVENTOR:

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LEGAL REPRESENTATIVE:

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PATENT (CC, No, Kind, Date): EP 1415998 A2 040506 (Basic)

APPLICATION (CC, No, Date): EP 2003019832 980220;

PRIORITY (CC, No, Date): US 804444 970221; US 12116 980122

DESIGNATED STATES: AT; BE; CH; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI; LU; MC; NL; PT; SE

EXTENDED DESIGNATED STATES: AL; LT; LV; MK; RO; SI

RELATED PARENT NUMBER(S) - PN (AN):

EP 968291 (EP 98911392)

INTERNATIONAL PATENT CLASS: C07K-016/24; A61K-047/48; C12N-015/13;  
C12N-015/63; C12N-005/10; A61K-039/395; A61P-037/00

ABSTRACT EP 1415998 A2

Humanized anti-IL-8 monoclonal antibodies and variants thereof are described for use in diagnostic applications and in the treatment of inflammatory disorders. Also described is a conjugate formed by an antibody fragment covalently attached to a non-proteinaceous polymer, wherein the apparent size of the conjugate is at least about 500 kD. The conjugate exhibits substantially improved half-life, mean residence time, and/or clearance rate in circulation as compared to the underivatized parental antibody fragment.

ABSTRACT WORD COUNT: 73

NOTE:

Figure number on first page: NONE

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	200419	1138
SPEC A	(English)	200419	69371
Total word count - document A			70509
Total word count - document B			0
Total word count - documents A + B			70509

4/3,AB/2 (Item 2 from file: 348)

DIALOG(R)File 348:EUROPEAN PATENTS

(c) 2004 European Patent Office. All rts. reserv.

01718563

Anti-**lymphotoxin**-beta receptor antibodies as anti-tumor agents  
Antikörper gegen den **Lymphotoxin** -beta-Rezeptor als Agenzien gegen  
Tumoren

Anticorps contre le recepteur de **lymphotoxine** -beta comme agents  
contre des tumeurs

PATENT ASSIGNEE:

BIOGEN, INC., (1049451), 14 Cambridge Center, Cambridge Massachusetts  
02142, (US), (Applicant designated States: all)

INVENTOR:

Browning, Jeffrey L., 32 Milton Road, Brookline, MA 02146, (US)

Meier, Werner, 31 Bedford Street, Burlington, MA 01803, (US)

Benjamin, Christopher D., 2 Oak Hill Lane, Beverly, MA 01915, (US)

LEGAL REPRESENTATIVE:

VOSSIUS & PARTNER (100314), Siebertstrasse 4, 81675 Munchen, (DE)

PATENT (CC, No, Kind, Date): EP 1407781 A1 040414 (Basic)

APPLICATION (CC, No, Date): EP 2003022584 960126;

PRIORITY (CC, No, Date): US 378968 950126

DESIGNATED STATES: AT; BE; CH; DE; DK; ES; FR; GB; GR; IE; IT; LI; LU; MC;  
NL; PT; SE

RELATED PARENT NUMBER(S) - PN (AN):

EP 809510 (EP 96906260)

INTERNATIONAL PATENT CLASS: A61K-039/395; A61P-035/00; C07K-016/28;  
C12N-005/20; A61K-039/395; A61K-38:21

## ABSTRACT EP 1407781 A1

This invention relates to compositions and methods useful for activating LT-(beta) receptor signalling, which in turn elicits potent anti-proliferative effects on tumor cells. More particularly, this invention relates to **lymphotoxin** heteromeric complexes formed between **lymphotoxin**-(alpha) and multiple subunits of **lymphotoxin**-(beta), which induce cytotoxic effects on tumor cells in the presence of **lymphotoxin**-(beta) receptor activating agents. Also within the scope of this invention are antibodies directed against the **lymphotoxin**-(beta) receptor which act as **lymphotoxin**-(beta) receptor activating agents alone or in combination with other **lymphotoxin**-(beta) receptor activating agents either in the presence or absence of **lymphotoxin**-(alpha)/(beta) complexes. A screening method for selecting such antibodies is provided. This invention also relates to compositions and methods using cross-linked anti-**lymphotoxin**-(beta) receptor antibodies either alone or in the presence of other **lymphotoxin**-(beta) receptor activating agents to potentiate tumor cell cytotoxicity.

ABSTRACT WORD COUNT: 135

## NOTE:

Figure number on first page: NONE

LANGUAGE (Publication,Procedural,Application): English; English; English  
 FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	200416	1114
SPEC A	(English)	200416	12179
Total word count - document A			13293
Total word count - document B			0
Total word count - documents A + B			13293

4/3,AB/3 (Item 3 from file: 348)  
 DIALOG(R)File 348:EUROPEAN PATENTS  
 (c) 2004 European Patent Office. All rts. reserv.

01560925

Anti-CD18 antibodies in stroke  
 Antikörper gegen CD18 bei Gehirnschlag  
 Anticorps dirige contre le CD18 dans l'ictus cerebral  
 PATENT ASSIGNEE:

Genentech, Inc., (210486), 1 DNA Way, South San Francisco, CA 94080-4990,  
 (US), (Applicant designated States: all)  
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 designated States: all)

## INVENTOR:

Bednar, Martin M., 11 Tom Wheeler Road, North Stonington, Connecticut  
 06359, (US)  
 Gross, Cordell E., 30 Ledgewood Drive, Williston, VT 05495, (US)  
 Thomas, G. Roger, 812 Park Avenue, Burlingame, California 94010, (US)

## LEGAL REPRESENTATIVE:

Walton, Sean Malcolm et al (77071), MEWBURN ELLIS, York House, 23  
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PATENT (CC, No, Kind, Date): EP 1297847 A2 030402 (Basic)

09/853367

EP 1297847 A3 030507  
APPLICATION (CC, No, Date): EP 2002078486 970111;  
PRIORITY (CC, No, Date): US 589982 960123  
DESIGNATED STATES: AT; BE; CH; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI; LU;  
MC; NL; PT; SE  
RELATED PARENT NUMBER(S) - PN (AN):  
EP 877626 (EP 97903790)  
INTERNATIONAL PATENT CLASS: A61K-039/395

ABSTRACT EP 1297847 A3

A method for improving clinical outcome in focal ischemic stroke in a mammal by increasing cerebral blood flow and/or reducing infarct size is described which involves administering an effective amount of an anti-CD18 antibody to the mammal, in the absence of removal of the arterial obstruction.

ABSTRACT WORD COUNT: 47

NOTE:

Figure number on first page: NONE

LANGUAGE (Publication,Procedural,Application): English; English; English  
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	200314	526
SPEC A	(English)	200314	11456
Total word count - document A			11982
Total word count - document B			0
Total word count - documents A + B			11982

4/3,AB/4 (Item 4 from file: 348)  
DIALOG(R)File 348:EUROPEAN PATENTS  
(c) 2004 European Patent Office. All rts. reserv.

01423379

Method for preparing water soluble polypeptides  
Verfahren zur Herstellung von wasserloslichen Polypeptiden  
Procede de preparation de polypeptides solubles dans l'eau  
PATENT ASSIGNEE:

Genentech, Inc., (210486), 1 DNA Way, South San Francisco, CA 94080-4990,  
(US), (Applicant designated States: all)

INVENTOR:

Bodary, Sarah C., 3530 Crestmoor Drive, San Bruno, California 94066, (US)  
Gorman, Cornelia M., 124 Belvedere Street, San Francisco, CA 94117, (US)  
McLean, John W., 782 Lakeshore Drive, Redwood City, California 94065,  
(US)

Napier, Mary A., 1015 Hayne Road, Hillsborough, CA 94010, (US)

LEGAL REPRESENTATIVE:

Cripps, Joanna Elizabeth et al (89381), Mewburn Ellis York House 23  
Kingsway, London WC2B 6HP, (GB)

PATENT (CC, No, Kind, Date): EP 1201757 A2 020502 (Basic)  
EP 1201757 A3 020911

APPLICATION (CC, No, Date): EP 2001124410 891220;  
PRIORITY (CC, No, Date): US 290224 881222; US 444490 891201  
DESIGNATED STATES: AT; BE; CH; DE; ES; FR; GB; IT; LI; LU; NL; SE  
RELATED PARENT NUMBER(S) - PN (AN):  
EP 452364 (EP 90901448)

Searcher : Shears 571-272-2528



09/853367

INTERNATIONAL PATENT CLASS: C12N-015/12; C12N-015/62; C07K-014/705;  
A61K-038/17; C12P-021/02

ABSTRACT EP 1201757 A2

Methods are provided for the preparation in recombinant host cells of biologically active soluble variants of discretely encoded, heteromultimer polypeptide receptors. Such variants are synthesized by the secretion from recombinant transformants of transmembrane-modified heteromultimer receptors. Preferred receptors are extracellular matrix, cell surface, or plasma protein-binding receptors such as GPIIb-IIIa.

ABSTRACT WORD COUNT: 50

NOTE:

Figure number on first page: NONE

LANGUAGE (Publication,Procedural,Application): English; English; English  
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	200218	1552
SPEC A	(English)	200218	12509
Total word count - document A			14061
Total word count - document B			0
Total word count - documents A + B			14061

4/3,AB/5 (Item 5 from file: 348)

DIALOG(R)File 348:EUROPEAN PATENTS

(c) 2004 European Patent Office. All rts. reserv.

01423378

Method for preparing water soluble polypeptides  
Verfahren zur Herstellung von wasserloslichen Polypeptiden  
Procede de preparation de polypeptides solubles dans l'eau  
PATENT ASSIGNEE:

Genentech, Inc., (210486), 1 DNA Way, South San Francisco, CA 94080-4990,  
(US), (Applicant designated States: all)

INVENTOR:

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Gorman, Cornelia M., 124 Belvedere Street, San Francisco, CA 94117, (US)  
McLean, John W., 782 Lakeshore Drive, Redwood City, California 94065,  
(US)

Napier, Mary A., 1015 Hayne Road, Hillsborough, CA 94010, (US)

LEGAL REPRESENTATIVE:

Cripps, Joanna Elizabeth et al (89381), Mewburn Ellis York House 23  
Kingsway, London WC2B 6HP, (GB)

PATENT (CC, No, Kind, Date): EP 1201756 A2 020502 (Basic)  
EP 1201756 A3 021030

APPLICATION (CC, No, Date): EP 2001124409 891220;

PRIORITY (CC, No, Date): US 290224 881222; US 444490 891201

DESIGNATED STATES: AT; BE; CH; DE; ES; FR; GB; IT; LI; LU; NL; SE

RELATED PARENT NUMBER(S) - PN (AN):

EP 452364 (EP 90901448)

INTERNATIONAL PATENT CLASS: C12N-015/12; C12N-015/62; C07K-014/705;  
A61K-038/17; C12P-021/02

ABSTRACT EP 1201756 A2

Methods are provided for the preparation in recombinant host cells of

Searcher : Shears 571-272-2528

biologically active soluble variants of discretely encoded, heteromultimer polypeptide receptors. Such variants are synthesized by the secretion from recombinant transformants of transmembrane-modified heteromultimer receptors. Preferred receptors are extracellular matrix, cell surface, or plasma protein-binding receptors such as GPIIb-IIIa.

ABSTRACT WORD COUNT: 50

NOTE:

Figure number on first page: NONE

LANGUAGE (Publication,Procedural,Application): English; English; English  
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	200218	1247
SPEC A	(English)	200218	12511
Total word count - document A			13758
Total word count - document B			0
Total word count - documents A + B			13758

4/3,AB/6 (Item 6 from file: 348)

DIALOG(R)File 348:EUROPEAN PATENTS

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01420942

Glycoprotein hormone receptor molecules. Their uses

Glycoprotein HormonRezeptor Molekule. Ihre Verwendungen

Molecules receptrices des hormones glycoproteiques. Leurs utilisations

PATENT ASSIGNEE:

Genentech Inc., (3217160), 1 DNA Way, South San Francisco, CA 94080-4990,

(US), (Applicant designated States: all)

INVENTOR:

Nikolics, Karoly, 209 Club Drive, San Carlos, California 94070, (US)

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Seeburg, Peter H., 5, Erzackerweg, 6900 Heidelberg, (DE)

LEGAL REPRESENTATIVE:

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PATENT (CC, No, Kind, Date): EP 1199361 A2 020424 (Basic)

EP 1199361 A3 040310

APPLICATION (CC, No, Date): EP 2001128817 900504;

PRIORITY (CC, No, Date): US 347683 890505

DESIGNATED STATES: AT; BE; CH; DE; DK; ES; FR; GB; IT; LI; LU; NL; SE

RELATED PARENT NUMBER(S) - PN (AN):

EP 614975 (EP 94104166)

EP 471030 (EP 90908349)

INTERNATIONAL PATENT CLASS: C12N-015/12; G01N-033/68; C12N-005/10;

C12N-001/19; C12N-001/21; C07K-014/72; C07K-016/28

ABSTRACT EP 1199361 A2

The invention relates to the purification, and cloning of receptors for the luteinizing hormone, choriogonadotropin, follicle stimulating hormone, and thyroid stimulating hormone. The invention additionally concerns the uses for such molecules in the diagnosis and therapy of human conditions.

ABSTRACT WORD COUNT: 40

NOTE:

Figure number on first page: NONE

LANGUAGE (Publication,Procedural,Application): English; English; English  
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	200217	1132
SPEC A	(English)	200217	25826
Total word count - document A			26958
Total word count - document B			0
Total word count - documents A + B			26958

4/3,AB/7 (Item 7 from file: 348)

DIALOG(R) File 348:EUROPEAN PATENTS

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01418576

METHOD OF EXTENSIVE CULTURE OF ANTIGEN-SPECIFIC CYTOTOXIC T CELLS  
 METHODE ZUR EXTENSIVEN KULTUR VON ANTIGEN-SPEZIFISCHEN CYTOTOXISCHEN  
 T-ZELLEN  
 PROCEDE DE CULTURE EXTENSIVE DE LYMPHOCYTES T CYTOTOXIQUES SPECIFIQUES DE  
 L'ANTIGENE

PATENT ASSIGNEE:

TAKARA BIO INC., (4118471), 4-1, Seta 3-chome, Otsu-shi, Shiga 520-2193,  
 (JP), (Applicant designated States: all)

INVENTOR:

SAGAWA, Hiroaki, 6-32, Nishishibukawa 2-chome, Kusatsu-shi, Shiga  
 525-0025, (JP)  
 IDENO, Mitsuko, 28-7, Uzumasainui-cho, Uzumasa, Ukyo-ku, Kyoto-shi, Kyoto  
 616-8176, (JP)  
 KATO, Ikunoshin, 1-1-150 Nanryo-cho, Uji-shi, Kyoto 611-0028, (JP)

LEGAL REPRESENTATIVE:

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 PATENT (CC, No, Kind, Date): EP 1312670 A1 030521 (Basic)  
 WO 2002014481 020221  
 APPLICATION (CC, No, Date): EP 2001956894 010815; WO 2001JP7032 010815  
 PRIORITY (CC, No, Date): JP 2000247072 000816  
 DESIGNATED STATES: AT; BE; CH; CY; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI;  
 LU; MC; NL; PT; SE; TR  
 EXTENDED DESIGNATED STATES: AL; LT; LV; MK; RO; SI  
 INTERNATIONAL PATENT CLASS: C12N-005/08; A61K-035/26; A61P-037/04

ABSTRACT EP 1312670 A1

The present invention provides methods for inducing, maintaining and expanding CTL (cytotoxic T cell) having an antigen-specific cytotoxic activity at a high level, which is useful in the adoptive immunotherapy, by using as an effective ingredient at least one compound selected from the group consisting of acidic polysaccharides, acidic oligosaccharides, acidic monosaccharides, and salts thereof. The above-mentioned compounds include fucoidans, heparins, alginic acid, chondroitin sulfate A, chondroitin sulfate B, pectic acid, **hyaluronic** acid, degradation products of fucoidans, sulfated glucose, sulfated fucose and salts thereof.

ABSTRACT WORD COUNT: 85

## NOTE:

Figure number on first page: NONE

LANGUAGE (Publication,Procedural,Application): English; English; Japanese  
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	200321	429
SPEC A	(English)	200321	26130
Total word count - document A			26559
Total word count - document B			0
Total word count - documents A + B			26559

4/3,AB/8 (Item 8 from file: 348)

DIALOG(R) File 348:EUROPEAN PATENTS

(c) 2004 European Patent Office. All rts. reserv.

01199671

USE OF **HYALURONIC** ACID OR FRAGMENTS THEREOF FOR THE PREPARATION OF A  
MEDICAMENT FOR REGULATING HEMATOPOIETIC DIFFERENTIATION  
VERWENDUNG VON **HYALURONSAURE** ODER FRAGMENTEN DAVON ZUR HERSTELLUNG EINES  
MEDIKAMENTES ZUR REGELUNG DER HAMATOPOIETISCHEN DIFFERENZIERUNG  
UTILISATION DE L'**ACIDE** **HYALURONIQUE** OU DES FRAGMENTS DE CELUI-CI POUR LA  
PREPARATION D'UN MEDICAMENT POUR LA REGULATION DE LA DIFFERENCIATION  
HEMATOPOIETIQUE

## PATENT ASSIGNEE:

INSTITUT NATIONAL DE LA SANTE ET DE LA RECHERCHE MEDICALE (INSERM),  
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## INVENTOR:

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DELPECH, Bertrand, 89, avenue Pasteur, F-76410 Saint Aubin les Elbeuf,  
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JASMIN, Claude, 52, avenue du General Leclerc, F-94200 Charenton, (FR)

## LEGAL REPRESENTATIVE:

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PATENT (CC, No, Kind, Date): EP 1150692 A2 011107 (Basic)

EP 1150692 B1 031217

WO 2000047163 000817

APPLICATION (CC, No, Date): EP 2000905120 000211; WO 2000FR349 000211

PRIORITY (CC, No, Date): FR 991644 990211

DESIGNATED STATES: AT; BE; CH; CY; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI;  
LU; MC; NL; PT; SE

EXTENDED DESIGNATED STATES: AL; LT; LV; MK; RO; SI

INTERNATIONAL PATENT CLASS: A61K-031/715; A61K-031/728; A61P-035/02

## NOTE:

No A-document published by EPO

LANGUAGE (Publication,Procedural,Application): French; French; French

## FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	200351	391
CLAIMS B	(German)	200351	341

CLAIMS B	(French)	200351	367
SPEC B	(French)	200351	10030
Total word count	- document A		0
Total word count	- document B		11129
Total word count	- documents A + B		11129

4/3,AB/9 (Item 9 from file: 348)  
 DIALOG(R) File 348:EUROPEAN PATENTS  
 (c) 2004 European Patent Office. All rts. reserv.

01108600

Use of carprofen and derivatives thereof for treating or preventing  
 articular degeneration

Verwendung von Carprofen und dessen Derivaten zur Vorbeugung oder  
 Behandlung degenerativer Gelenkerkrankung

Utilisation du carprofene et ses derives pour la prevention ou le  
 traitement de la degeneration articulaire

## PATENT ASSIGNEE:

Pfizer Products Inc., (2434221), Eastern Point Road, Groton, Connecticut  
 06340, (US), (Applicant designated States: all)

## INVENTOR:

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 (US)

Lundy, Kristin Marie, 600 Meridian Street, Apartment 631, Groton,  
 Connecticut 06340, (US)

Pelletier, Jean-Pierre, 229 Dujura, St. Lambert, Quebec J4S1G4, (CA)

Ricketts, Anthony Paul, 1306 Pequot Trail, Stonington, Connecticut 06378,  
 (US)

## LEGAL REPRESENTATIVE:

Simpson, Alison Elizabeth Fraser et al (77401), Urquhart-Dykes & Lord, 91  
 Wimpole Street, London W1M 8AH, (GB)

PATENT (CC, No, Kind, Date): EP 970694 A2 000112 (Basic)  
 EP 970694 A3 000126

APPLICATION (CC, No, Date): EP 99303528 990505;

PRIORITY (CC, No, Date): US 86457 P 980522

DESIGNATED STATES: AT; BE; CH; CY; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI;  
 LU; NL; PT; SE

EXTENDED DESIGNATED STATES: AL; LT; LV; MK; RO; SI

INTERNATIONAL PATENT CLASS: A61K-031/405

## ABSTRACT EP 970694 A3

Treating or preventing the early stages of degeneration of articular  
 cartilage or subchondral bone in the affected joint of a mammal is  
 accomplished by administering a chondroprotective compound of Formula  
 (I): wherein where A is hydroxy, (C1)) - C4))alkoxy, amino,  
 hydroxy-amino, mono-(C1)) -C2))alkylamino, di-(C1)) -C2))alkylamino; X  
 and Y are independently H or (C1)) - C2))alkyl; and n is 1 or 2; R6) is  
 halogen, (C1)) - C3))alkyl, trifluoromethyl, or nitro; R9) is H; (C1)) -  
 C2))alkyl; phenyl or phenyl-(C1)) - C2))alkyl, where phenyl is  
 optionally mono-substituted by fluoro or chloro; -C(=O)-R, where R is  
 (C1)) -C2))alkyl or phenyl, optionally mono-substituted by fluoro or  
 chloro; or -C(=O)-O-R1, where R1) is (C1)) - C2))alkyl.

This treatment ameliorates, diminishes, actively treats, reverses or  
 prevents any injury, damage or loss of articular cartilage or subchondral

bone subsequent to said early stage of said degeneration. Whether or not a mammal needs such treatment is determined by whether or not it exhibits a statistically significant deviation from normal standard values in synovial fluid or membrane from the affected joint, with respect to at least five of the following substances: increased interleukin-1 beta (IL-1(beta)); increased tumor necrosis factor alpha (TNF(alpha)); increased ratio of IL-1(beta) to IL-1 receptor antagonist protein (IRAP); increased expression of p55 TNF receptors (p55 TNF-R); increased interleukin-6 (IL-6); increased leukemia inhibitory factor (LIF); decreased insulin-like growth factor-1 (IGF-1); decreased transforming growth factor beta (TGF(beta)); decreased platelet-derived growth factor (PDGF); decreased basic fibroblast growth factor (b-FGF); increased keratan sulfate; increased stromelysin; increased ratio of stromelysin to tissue inhibitor of metalloproteases (TIMP); increased osteocalcin; increased alkaline phosphatase; increased cAMP responsive to hormone challenge; increased urokinase plasminogen activator (uPA); increased cartilage oligomeric matrix protein; and increased collagenase.

ABSTRACT WORD COUNT: 280

LANGUAGE (Publication,Procedural,Application): English; English; English  
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	200002	1401
SPEC A	(English)	200002	19357
Total word count - document A			20758
Total word count - document B			0
Total word count - documents A + B			20758

4/3,AB/10 (Item 10 from file: 348)  
DIALOG(R) File 348:EUROPEAN PATENTS  
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01013993

COMBINED PRODUCT ASSOCIATING A NUCLEIC ACID WITH A SUBSTANCE BREAKING UP THE EXTRACELLULAR MATRIX FOR GENE THERAPY  
KOMBINATIONSPRODUKT, ENTHALTEND EINE NUKLEINSAURE UND EINE SUBSTANZ, DIE DIE EXTRAZELLULAREMATRIX DESORGANISIERT, ZUR VERWENDUNG IN GENTHERAPIE  
PRODUIT DE COMBINAISON ASSOCIANT UN ACIDE NUCLEIQUE A UNE SUBSTANCE DESORGANISANT LA MATRICE EXTRACELLULAIRE POUR LA THERAPIE GENIQUE

PATENT ASSIGNEE:

TRANSGENE S.A., (526748), 11, rue de Molsheim, 67000 Strasbourg, (FR),  
(Proprietor designated states: all)

ASSOCIATION FRANCAISE CONTRE LES MYOPATHIES, (1871160), 13, place de Rungis, F-75013 Paris, (FR), (Proprietor designated states: all)

INVENTOR:

BRAUN, Serge, 28, Faubourg des Vosges, F-67120 Dorlisheim, (FR)

LEGAL REPRESENTATIVE:

Warcoin, Jacques et al (19071), Cabinet Regimbeau 20, rue de Chazelles, 75847 Paris cedex 17, (FR)

PATENT (CC, No, Kind, Date): EP 980263 A1 000223 (Basic)  
EP 980263 B1 020925  
WO 98053853 981203

APPLICATION (CC, No, Date): EP 98928391 980529; WO 98FR1084 980529

PRIORITY (CC, No, Date): FR 976600 970529

DESIGNATED STATES: AT; BE; CH; CY; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI;

09/853367

LU; MC; NL; PT; SE  
INTERNATIONAL PATENT CLASS: A61K-048/00; A61K-038/46  
NOTE:

No A-document published by EPO  
LANGUAGE (Publication,Procedural,Application): French; French; French  
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	200239	840
CLAIMS B	(German)	200239	778
CLAIMS B	(French)	200239	827
SPEC B	(French)	200239	4716
Total word count - document A			0
Total word count - document B			7161
Total word count - documents A + B			7161

4/3,AB/11 (Item 11 from file: 348)  
DIALOG(R)File 348:EUROPEAN PATENTS  
(c) 2004 European Patent Office. All rts. reserv.

01007907

LIGHT IMAGING CONTRAST AGENTS  
LICHTBILDERZEUGUNGSKONTRASTMITTELN

AGENTS DE CONTRASTE UTILISES DANS DES TECHNIQUES D'IMAGERIE BASEES SUR LA  
LUMIERE

PATENT ASSIGNEE:

Amersham Health AS, (3995792), Nycoveien 1-2, 0401 Oslo, (NO),  
(Proprietor designated states: all)

INVENTOR:

SNOW, Robert, Allen, Nycomed Amersham Imaging, 466 Devon Park Drive,  
Wayne, PA 19087-8630, (US)  
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SANDERSON, William A., Nycomed Amersham Imaging, 466 Devon Park Drive,  
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DESAI, Vinay Chandrakant, Nycomed Amersham Imaging, 466 Devon Park Drive,  
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BACON, Edward, Nycomed Amersham Imaging, 466 Devon Park Drive, Wayne, PA  
19087-8630, (US)  
HOLLISTER, Kenneth R., Nycomed Amersham Imaging, 466 Devon Park Drive,  
Wayne, PA 19087-8630, (US)  
HOHENSCHUH, Eric, Paul, Nycomed Amersham Imaging, 466 Devon Park Drive,  
Wayne, PA 19087-8630, (US)

LEGAL REPRESENTATIVE:

Canning, Lewis R. et al (93181), Amersham plc Amersham Place, Little  
Chalfont, Bucks. HP7 9NA, (GB)

PATENT (CC, No, Kind, Date): EP 979103 A1 000216 (Basic)  
EP 979103 B1 040102  
WO 1998048838 981105

APPLICATION (CC, No, Date): EP 98919335 980428; WO 98GB1244 980428  
PRIORITY (CC, No, Date): US 848586 970429; GB 9727124 971222; US 35285  
980305

DESIGNATED STATES: AT; BE; CH; CY; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI;  
LU; MC; NL; PT; SE

Searcher : Shears 571-272-2528

09/853367

INTERNATIONAL PATENT CLASS: A61K-041/00; A61K-049/00

NOTE:

No A-document published by EPO

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	200401	614
CLAIMS B	(German)	200401	543
CLAIMS B	(French)	200401	717
SPEC B	(English)	200401	22188
Total word count - document A			0
Total word count - document B			24062
Total word count - documents A + B			24062

4/3,AB/12 (Item 12 from file: 348)

DIALOG(R)File 348:EUROPEAN PATENTS

(c) 2004 European Patent Office. All rts. reserv.

00999326

Thermal preactivation of gaseous precursor filled compositions  
Thermische Voraktivierung von Zusammensetzungen mit einer Füllung bestehend  
aus gasförmigen Vorläufer

Preactivation thermique de compositions remplies d'un précurseur gazeux

PATENT ASSIGNEE:

IMARX PHARMACEUTICAL CORP., (2069730), 1635 East 18th Street, Tucson, AZ  
85749, (US), (applicant designated states:

AT;BE;CH;CY;DE;DK;ES;FI;FR;GB;GR;IE;IT;LI;LU;MC;NL;PT;SE)

INVENTOR:

Unger, Evan C., 13365 East Camino, La Cebadilla, Tucson, Arizona 85749,  
(US)

LEGAL REPRESENTATIVE:

James, Anthony Christopher W.P. et al (78471), Carpmaels & Ransford 43  
Bloomsbury Square, London WC1A 2RA, (GB)

PATENT (CC, No, Kind, Date): EP 901793 A1 990317 (Basic)

APPLICATION (CC, No, Date): EP 98307421 980914;

PRIORITY (CC, No, Date): US 929847 970915

DESIGNATED STATES: DE; ES; FR; GB; IT

INTERNATIONAL PATENT CLASS: A61K-049/00; A61K-041/00;

ABSTRACT EP 901793 A1

The present invention describes, among other things, the surprising discovery that gaseous precursor filled compositions are profoundly more effective as acoustically active contrast agents when they are thermally preactivated to temperatures at or above the boiling point of the instilled gaseous precursor prior to their in vivo administration to a patient. Further optimization of contrast enhancement is achieved by administering the gaseous precursor filled compositions to a patient as an infusion. Enhanced effectiveness is also achieved for ultrasound mediated targeting and drug delivery.

ABSTRACT WORD COUNT: 84

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	9911	1390
SPEC A	(English)	9911	51117

Searcher : Shears 571-272-2528



09/853367

Total word count - document A 52507  
Total word count - document B 0  
Total word count - documents A + B 52507

4/3,AB/13 (Item 13 from file: 348)  
DIALOG(R) File 348:EUROPEAN PATENTS  
(c) 2004 European Patent Office. All rts. reserv.

00996538

Analogs for specific oligosaccharide-protein interactions and uses therefor  
Analoge für spezifische Oligosaccharide-Protein-Wechselwirkungen und ihre  
Verwendungen

Analogue d'interactions spécifiques oligosaccharide-proteine et leurs  
utilisations

PATENT ASSIGNEE:

Glycan Pharmaceuticals, Inc., (1848031), 117 Fourth Avenue, Needham,  
Massachusetts 02194, (US), (applicant designated states:  
AT;BE;CH;DE;DK;ES;FR;GB;GR;IE;IT;LI;LU;MC;NL;PT;SE)

INVENTOR:

Witt, Daniel P., 288 Essex Street, Hamilton, MA 01982, (US)  
Herlihy, Walter C., Jr., 11 Brookhead Avenue, Beverly, Massachusetts  
01915, (US)

LEGAL REPRESENTATIVE:

Harvey, David Gareth et al (31631), Graham Watt & Co. Riverhead,  
Sevenoaks Kent TN13 2BN, (GB)

PATENT (CC, No, Kind, Date): EP 900804 A2 990310 (Basic)

APPLICATION (CC, No, Date): EP 98114248 940228;

PRIORITY (CC, No, Date): US 24558 930301

DESIGNATED STATES: AT; BE; CH; DE; DK; ES; FR; GB; GR; IE; IT; LI; LU; MC;  
NL; PT; SE

RELATED PARENT NUMBER(S) - PN (AN):

EP 688327 (EP 949107551)

INTERNATIONAL PATENT CLASS: C07H-011/00; C07K-014/00; C07K-014/47;  
C07K-014/50; C07K-014/52; C07K-014/54; C08B-037/00; A61K-049/00;  
A61K-047/48;

ABSTRACT EP 900804 A2

Disclosed are: (1) methods for identifying natural and synthetic  
sequences having binding specificity for glycan-binding proteins,  
including proteins that act as effectors of biological activity, (2)  
compositions and methods of producing protein-specific glycosaminoglycan  
sequence and ligand antagonists capable of modulating the effector  
function of these ligands, and therapeutic compositions comprising these  
antagonists; and (3) compositions and methods for producing  
protein-specific glycosaminoglycan sequence analogs useful as agonists,  
and therapeutic compositions comprising these agonists.

ABSTRACT WORD COUNT: 73

LANGUAGE (Publication,Procedural,Application): English; English; English  
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	9910	268
SPEC A	(English)	9910	17667
Total word count - document A			17935
Total word count - document B			0

Searcher : Shears 571-272-2528

09/853367

Total word count - documents A + B 17935

4/3,AB/14 (Item 14 from file: 348)  
DIALOG(R)File 348:EUROPEAN PATENTS  
(c) 2004 European Patent Office. All rts. reserv.

00987210

ANTIBODY FRAGMENT-POLYMER CONJUGATES  
ANTI-KORPERFRAGMENT-POLYMERKONJUGATE  
CONJUGUES DE POLYMERES ET DE FRAGMENTS D'ANTICORPS  
PATENT ASSIGNEE:

Genentech, Inc., (210486), 1 DNA Way, South San Francisco, CA 94080-4990,  
(US), (Proprietor designated states: all)

INVENTOR:

HSEI, Vanessa, 5047 Capistrano Avenue, San Jose, CA 95129, (US)  
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94306, (US)

LEONG, Steven, R., 1914 Eldorado Avenue, Berkeley, CA 94707, (US)  
PRESTA, Leonard, G., 1900 Gough Street 206, San Francisco, CA 94109,  
(US)

SHAHROKH, Zahra, 24 Sotelo Avenue, San Francisco, CA 94116, (US)  
ZAPATA, Gerardo, A., 785 Widgeon Street, Foster City, CA 94404, (US)

LEGAL REPRESENTATIVE:

Kiddle, Simon John et al (79861), Mewburn Ellis, York House, 23 Kingsway,  
London WC2B 6HP, (GB)

PATENT (CC, No, Kind, Date): EP 968291 A2 000105 (Basic)  
EP 968291 B1 040128  
WO 1998037200 980827

APPLICATION (CC, No, Date): EP 98911392 980220; WO 98US3337 980220

PRIORITY (CC, No, Date): US 804444 970221; US 12116 980122

DESIGNATED STATES: AT; BE; CH; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI; LU;  
MC; NL; PT; SE

EXTENDED DESIGNATED STATES: AL; LT; LV; MK; RO; SI

RELATED DIVISIONAL NUMBER(S) - PN (AN):  
(EP 2003019832)

INTERNATIONAL PATENT CLASS: C12N-015/13; C07K-019/00; A61K-047/48;  
C07K-016/24; C12N-015/85; C12N-005/10

NOTE:

No A-document published by EPO  
LANGUAGE (Publication,Procedural,Application): English; English; English  
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	200405	1123
CLAIMS B	(German)	200405	1012
CLAIMS B	(French)	200405	1207
SPEC B	(English)	200405	47093
Total word count - document A			0
Total word count - document B			50435
Total word count - documents A + B			50435

4/3,AB/15 (Item 15 from file: 348)  
DIALOG(R)File 348:EUROPEAN PATENTS  
(c) 2004 European Patent Office. All rts. reserv.

Searcher : Shears 571-272-2528

09/853367

00972472

HOEFCC11, a HAS2 splicing variant  
HOEFCC11, eine HAS2 Spleissvariante  
HOEFCC11, variante d'epissure de HAS2

PATENT ASSIGNEE:

SMITHKLINE BEECHAM CORPORATION, (201244), One Franklin Plaza P.O. Box  
7929, Philadelphia Pennsylvania 19103, (US), (Applicant designated  
States: all)

INVENTOR:

Zhu, Yuan, SmithKline Beecham Pharm., 709 Swedeland Road, King of  
Prussia, Pennsylvania 19406, (US)  
Nambi, Ponnal, SmithKline Beecham Pharm., 709 Swedeland Road, King of  
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Pullen, Mark, SmithKline Beecham Pharm., 709 Swedeland Road, King of  
Prussia, Pennsylvania 19406, (US)

LEGAL REPRESENTATIVE:

Crump, Julian Richard John et al (79221), FJ Cleveland, 40-43 Chancery  
Lane, London WC2A 1JQ, (GB)

PATENT (CC, No, Kind, Date): EP 881294 A2 981202 (Basic)  
EP 881294 A3 000621

APPLICATION (CC, No, Date): EP 98303991 980520;

PRIORITY (CC, No, Date): US 865273 970529

DESIGNATED STATES: BE; CH; DE; DK; FR; GB; IT; LI; NL

EXTENDED DESIGNATED STATES: AL; LT; LV; MK; RO; SI

INTERNATIONAL PATENT CLASS: C12N-015/54; C12N-009/10; C12N-001/21;  
C12N-005/10; C07K-016/40; A61K-031/70; A61K-039/395; A61K-038/45;  
C12Q-001/68; C12Q-001/48

ABSTRACT EP 881294 A2

HOEFC 11 polypeptides and polynucleotides and methods for producing  
such polypeptides by recombinant techniques are disclosed. Also disclosed  
are methods for utilizing HOEFC 11 polypeptides and polynucleotides in  
the design of protocols for the treatment of chronic renal failure,  
inflammatory diseases, myocardial ischemia, cancer, rheumatoid arthritis,  
cirrhotic liver disease, among others, and diagnostic assays for such  
conditions.

ABSTRACT WORD COUNT: 58

LANGUAGE (Publication,Procedural,Application): English; English; English  
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	9849	609
SPEC A	(English)	9849	7427
Total word count - document A			8036
Total word count - document B			0
Total word count - documents A + B			8036

4/3,AB/16 (Item 16 from file: 348)

DIALOG(R)File 348:EUROPEAN PATENTS

(c) 2004 European Patent Office. All rts. reserv.

00939412

Human DNase  
Menschliche DNase  
DNase humaine

Searcher : Shears 571-272-2528

09/853367

PATENT ASSIGNEE:

Genentech, Inc., (210486), 1 DNA Way, South San Francisco, CA 94080-4990,  
(US), (applicant designated states:  
AT;BE;CH;DE;ES;FR;GB;GR;IT;LI;LU;NL;SE)

INVENTOR:

Shak, Steven, 1133 Cambridge Road, Burlingame, CA 94010, (US)

LEGAL REPRESENTATIVE:

Walton, Sean Malcolm et al (77071), MEWBURN ELLIS, York House, 23  
Kingsway, London WC2B 6HP, (GB)

PATENT (CC, No, Kind, Date): EP 853121 A2 980715 (Basic)  
EP 853121 A3 980805

APPLICATION (CC, No, Date): EP 98105190 891220;

PRIORITY (CC, No, Date): US 289958 881223; US 448038 891208

DESIGNATED STATES: AT; BE; CH; DE; ES; FR; GB; GR; IT; LI; LU; NL; SE

RELATED PARENT NUMBER(S) - PN (AN):

EP 449968 (EP 909014433)

INTERNATIONAL PATENT CLASS: C12N-009/22; C12N-015/55; C12N-015/83;

ABSTRACT EP 853121 A3

DNA isolates coding for human DNase and methods of obtaining such DNA  
are provided, together with expression systems for recombinant production  
of human DNase useful in therapeutic or diagnostic compositions.

ABSTRACT WORD COUNT: 31

LANGUAGE (Publication,Procedural,Application): English; English; English  
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	9829	338
SPEC A	(English)	9829	12750
Total word count - document A			13088
Total word count - document B			0
Total word count - documents A + B			13088

4/3,AB/17 (Item 17 from file: 348)

DIALOG(R)File 348:EUROPEAN PATENTS

(c) 2004 European Patent Office. All rts. reserv.

00876614

ANTI-CD18 ANTIBODIES FOR USE AGAINST STROKE

ANTIKORPER GEGEN CD 18 ZUR VERWENDUNG GEGEN GEHIRNSCHLAG

ANTICORPS DIRIGE CONTRE LE CD18 ET UTILISE DANS LE TRAITEMENT DE L'ICTUS  
CEREBRAL

PATENT ASSIGNEE:

GENENTECH, INC., (210485), 460 Point San Bruno Boulevard, South San  
Francisco, CA 94080-4990, (US), (Proprietor designated states: all)  
THE UNIVERSITY OF VERMONT AND STATE AGRICULTURAL COLLEGE, (802295), 85  
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INVENTOR:

BEDNAR, Martin, M., 33 Bartlett Bay Road, South Burlington, VT 05403,  
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GROSS, Cordell, E., 1001 Dorset Street, South Burlington, VT 05403, (US)  
THOMAS, G., Roger, 812 Park Avenue, Burlingame, CA 94010, (US)

LEGAL REPRESENTATIVE:

Walton, Sean Malcolm et al (77071), MEWBURN ELLIS, York House, 23

Searcher : Shears 571-272-2528

09/853367

Kingsway, London WC2B 6HP, (GB)  
PATENT (CC, No, Kind, Date): EP 877626 A2 981118 (Basic)  
EP 877626 B1 020828  
WO 97026912 970731  
APPLICATION (CC, No, Date): EP 97903790 970111; WO 97US492 970111  
PRIORITY (CC, No, Date): US 589982 960123  
DESIGNATED STATES: AT; BE; CH; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI; LU;  
MC; NL; PT; SE  
RELATED DIVISIONAL NUMBER(S) - PN (AN):  
(EP 2002078486)

INTERNATIONAL PATENT CLASS: A61K-039/395; A61J-001/00

NOTE:

No A-document published by EPO  
LANGUAGE (Publication,Procedural,Application): English; English; English  
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	200235	258
CLAIMS B	(German)	200235	240
CLAIMS B	(French)	200235	288
SPEC B	(English)	200235	12010
Total word count - document A			0
Total word count - document B			12796
Total word count - documents A + B			12796

4/3,AB/18 (Item 18 from file: 348)  
DIALOG(R)File 348:EUROPEAN PATENTS  
(c) 2004 European Patent Office. All rts. reserv.

00829308

NOVEL TARGETED COMPOSITIONS FOR DIAGNOSTIC AND THERAPEUTIC USE  
NEUE ZIELGERICHTETE MITTEL ZUR DIAGNOSTISCHEN UND THERAPEUTISCHEN  
VERWENDUNG

NOUVELLES COMPOSITIONS CIBLEES, DESTINEES A UNE UTILISATION DIAGNOSTIQUE ET  
THERAPEUTIQUE

PATENT ASSIGNEE:

IMARX PHARMACEUTICAL CORP., (2069730), 1635 East 18th Street, Tucson, AZ  
85749, (US), (Proprietor designated states: all)

INVENTOR:

UNGER, Evan, C., 13365 East Camino La Cebadilla, Tucson, AZ 85749, (US)

SHEN, Dekang, 2602 West Alden Street, Tucson, AZ 85745, (US)

WU, Guanli, 2602 West Alden Street, Tucson, AZ 85745, (US)

LEGAL REPRESENTATIVE:

Hallybone, Huw George et al (53031), Carpmaels and Ransford, 43  
Bloomsbury Square, London WC1A 2RA, (GB)

PATENT (CC, No, Kind, Date): EP 831932 A1 980401 (Basic)  
EP 831932 B1 040506  
WO 1996040285 961219

APPLICATION (CC, No, Date): EP 96921486 960606; WO 96US9938 960606

PRIORITY (CC, No, Date): US 497684 950607; US 640464 960501

DESIGNATED STATES: AT; BE; CH; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI; LU;  
MC; NL; PT; SE

INTERNATIONAL PATENT CLASS: A61K-049/18; A61K-049/04; A61B-005/055;  
A61P-007/02

NOTE:

No A-document published by EPO

Searcher : Shears 571-272-2528

09/853367

LANGUAGE (Publication,Procedural,Application): English; English; English  
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	200419	758
CLAIMS B	(German)	200419	708
CLAIMS B	(French)	200419	828
SPEC B	(English)	200419	44937
Total word count - document A			0
Total word count - document B			47231
Total word count - documents A + B			47231

4/3,AB/19 (Item 19 from file: 348)  
DIALOG(R) File 348:EUROPEAN PATENTS  
(c) 2004 European Patent Office. All rts. reserv.

00652357

ANALOGS FOR SPECIFIC OLIGOSACCHARIDE-PROTEIN INTERACTIONS AND USES THEREFOR  
ANALOGUE FUR SPEZIFISCHE OLIGOSACCHARID-PROTEIN-WECHSELWIRKUNGEN UND IHRE  
VERWENDUNGEN  
ANALOGUES D'INTERACTIONS SPECIFIQUES OLIGOSACCHARIDE-PROTEINE ET LEUR  
UTILISATIONS

PATENT ASSIGNEE:

Glycan Pharmaceuticals, Inc., (1848030), One Kendall Square, Building 700  
, Cambridge, MA 02139, (US), (applicant designated states:  
AT;BE;CH;DE;DK;ES;FR;GB;GR;IE;IT;LI;LU;MC;NL;PT;SE)

INVENTOR:

WITT, Daniel, P., 288 Essex Street, Hamilton, MA 01982, (US)  
HERLIHY, Walter, C., Jr., 11 Brookhead Avenue, Beverly, MA 01915, (US)

LEGAL REPRESENTATIVE:

Harvey, David Gareth et al (31631), Graham Watt & Co. Riverhead,  
Sevenoaks Kent TN13 2BN, (GB)

PATENT (CC, No, Kind, Date): EP 688327 A1 951227 (Basic)  
EP 688327 B1 990506  
WO 9420512 940915

APPLICATION (CC, No, Date): EP 94910755 940228; WO 94US2051 940228

PRIORITY (CC, No, Date): US 24558 930301

DESIGNATED STATES: AT; BE; CH; DE; DK; ES; FR; GB; GR; IE; IT; LI; LU; MC;  
NL; PT; SE

INTERNATIONAL PATENT CLASS: C07H-011/00; C08B-037/10; A61K-031/70;

A61K-031/725; C07K-002/00; C07K-004/00; C07K-014/00; C07K-016/00;

C12N-009/00; A61K-038/00; A61K-051/00;

NOTE:

No A-document published by EPO

LANGUAGE (Publication,Procedural,Application): English; English; English  
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	9918	572
CLAIMS B	(German)	9918	605
CLAIMS B	(French)	9918	610
SPEC B	(English)	9918	17594
Total word count - document A			0
Total word count - document B			19381
Total word count - documents A + B			19381

4/3,AB/20 (Item 20 from file: 348)  
 DIALOG(R)File 348:EUROPEAN PATENTS  
 (c) 2004 European Patent Office. All rts. reserv.

00632922

Glycoprotein hormone receptor molecules  
 Glykoprotein-Hormonrezeptor-Molekule  
 Molecules receptrices d'hormone de glycoproteine  
 PATENT ASSIGNEE:

GENENTECH, INC., (210480), 460 Point San Bruno Boulevard, South San  
 Francisco California 94080, (US), (Proprietor designated states: all)

INVENTOR:

Nikolics, Karoly, 209 Club Drive, San Carlos, California 94070, (US)  
 Mcfarland, Keith C., 1905 Berryman Street, Berkeley, California 94709,  
 (US)

Segaloff, Deborah L., 28 Hunters Court, Iowa City Iowa 52240, (US)  
 Seeburg, Peter H., 5, Erzackerweg, D-6900 Heidelberg, (DE)

LEGAL REPRESENTATIVE:

Armitage, Ian Michael et al (27761), MEWBURN ELLIS York House 23 Kingsway  
 , London WC2B 6HP, (GB)

PATENT (CC, No, Kind, Date): EP 614975 A1 940914 (Basic)  
 EP 614975 B1 020724

APPLICATION (CC, No, Date): EP 94104166 900504;

PRIORITY (CC, No, Date): US 347683 890505

DESIGNATED STATES: AT; BE; CH; DE; DK; ES; FR; GB; IT; LI; LU; NL; SE

RELATED PARENT NUMBER(S) - PN (AN):

EP 471030 (EP 90908349)

RELATED DIVISIONAL NUMBER(S) - PN (AN):

EP 1199361 (EP 2001128817)

INTERNATIONAL PATENT CLASS: C12N-015/12; C12N-001/21; C12N-005/10;  
 C07K-014/72

ABSTRACT EP 614975 A1

The invention relates to the purification, and cloning of receptors for  
 the luteinizing hormone, choriogonadotropin, follicle stimulating  
 hormone, and thyroid stimulating hormone. The invention additionally  
 concerns the uses for such molecules in the diagnosis and therapy of  
 human conditions.

ABSTRACT WORD COUNT: 41

NOTE:

Figure number on first page: NONE

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	EPABF2	407
CLAIMS B	(English)	200230	319
CLAIMS B	(German)	200230	298
CLAIMS B	(French)	200230	375
SPEC A	(English)	EPABF2	25992
SPEC B	(English)	200230	25246
Total word count - document A			26404
Total word count - document B			26238
Total word count - documents A + B			52642

09/853367

4/3,AB/21 (Item 21 from file: 348)  
DIALOG(R)File 348:EUROPEAN PATENTS  
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00499166

HYBRID IMMUNOGLOBULINS  
HYBRIDE IMMUNGLOBULINE  
IMMUNOGLOBULINES HYBRIDES

PATENT ASSIGNEE:

GENENTECH, INC., (210485), 460 Point San Bruno Boulevard, South San  
Francisco, CA 94080-4990, (US), (Proprietor designated states: all)

INVENTOR:

CAPON, Daniel, J., 817 Oregon Street, San Mateo, CA 94402, (US)  
LASKY, Laurence, A., Star Route Box 460, Sausalito, CA 94965, (US)

LEGAL REPRESENTATIVE:

Armitage, Ian Michael et al (27761), MEWBURN ELLIS York House 23 Kingsway  
, London WC2B 6HP, (GB)

PATENT (CC, No, Kind, Date): EP 526452 A1 930210 (Basic)  
EP 526452 B1 010221  
WO 9108298 910613

APPLICATION (CC, No, Date): EP 91901202 901121; WO 90US6849 901121

PRIORITY (CC, No, Date): US 440625 891122

DESIGNATED STATES: AT; BE; CH; DE; DK; ES; FR; GB; GR; IT; LI; LU; NL; SE

RELATED DIVISIONAL NUMBER(S) - PN (AN):

EP 1029870 (EP 99123412)

INTERNATIONAL PATENT CLASS: C12N-015/62; C12N-015/13; C12N-015/14;  
C12N-015/12; C12N-005/10

NOTE:

No A-document published by EPO

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	200108	1844
CLAIMS B	(German)	200108	1555
CLAIMS B	(French)	200108	2240
SPEC B	(English)	200108	18948
Total word count - document A			0
Total word count - document B			24587
Total word count - documents A + B			24587

4/3,AB/22 (Item 22 from file: 348)  
DIALOG(R)File 348:EUROPEAN PATENTS  
(c) 2004 European Patent Office. All rts. reserv.

00448489

GLYCOPROTEIN HORMONE RECEPTOR MOLECULES.  
GLYKOPROTEIN-HORMONREZEPTOR-MOLEKULE.  
MOLECULES RECEPTRICES D'HORMONE DE GLYCOPROTEINE.

PATENT ASSIGNEE:

GENENTECH, INC., (210480), 460 Point San Bruno Boulevard, South San  
Francisco California 94080, (US), (applicant designated states:  
AT;BE;CH;DE;DK;ES;FR;GB;IT;LI;LU;NL;SE)

INVENTOR:

NIKOLICS, Karoly, 209 Club Drive, San Carlos, CA 94070, (US)  
MCFARLAND, Keith, C., 1905 Berryman Street, Berkeley, CA 94709, (US)



09/853367

SEGALOFF, Deborah, L., 661 Tilden Avenue, Teaneck, NJ 07666, (US)  
SEEBURG, Peter, H., 5, Erzackerweg, D-6900 Heidelberg, (DE)

LEGAL REPRESENTATIVE:

Armitage, Ian Michael et al (27762), MEWBURN ELLIS York House 23 Kingsway  
, London WC2B 6HP, (GB)

PATENT (CC, No, Kind, Date): EP 471030 A1 920219 (Basic)  
EP 471030 B1 941214  
WO 9013643 901115

APPLICATION (CC, No, Date): EP 90908349 900504; WO 90US2488 900504

PRIORITY (CC, No, Date): US 347683 890505

DESIGNATED STATES: AT; BE; CH; DE; DK; ES; FR; GB; IT; LI; LU; NL; SE

INTERNATIONAL PATENT CLASS: A61K-037/02;

NOTE:

No A-document published by EPO

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	EPBBF1	487
CLAIMS B	(German)	EPBBF1	390
CLAIMS B	(French)	EPBBF1	587
SPEC B	(English)	EPBBF1	23108
Total word count - document A			0
Total word count - document B			24572
Total word count - documents A + B			24572

4/3,AB/23 (Item 23 from file: 348)

DIALOG(R)File 348:EUROPEAN PATENTS

(c) 2004 European Patent Office. All rts. reserv.

00443946

METHOD FOR PREPARING WATER SOLUBLE POLYPEPTIDES  
VERFAHREN ZUR HERSTELLUNG VON WASSERLOSlichen POLYPEPTIDEN  
PROCEDE DE PREPARATION DE POLYPEPTIDES SOLUBLES DANS L'EAU  
PATENT ASSIGNEE:

GENENTECH, INC., (210480), 460 Point San Bruno Boulevard, South San  
Francisco California 94080, (US), (Proprietor designated states: all)

INVENTOR:

BODARY, Sarah, C., 1715 20th Street, San Francisco, CA 94107, (US)  
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McLEAN, John, W., 622-1 San Bruno Avenue, San Francisco, CA 94107, (US)  
NAPIER, Mary, A., 1015 Hayne Road, Hillsborough, CA 94010, (US)

LEGAL REPRESENTATIVE:

Armitage, Ian Michael et al (27761), MEWBURN ELLIS York House 23 Kingsway  
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PATENT (CC, No, Kind, Date): EP 452364 A1 911023 (Basic)  
EP 452364 B1 020522  
WO 9006953 900628

APPLICATION (CC, No, Date): EP 90901448 891220; WO 89US5743 891220

PRIORITY (CC, No, Date): US 290224 881222; US 444490 891201

DESIGNATED STATES: AT; BE; CH; DE; ES; FR; GB; IT; LI; LU; NL; SE

RELATED DIVISIONAL NUMBER(S) - PN (AN):

EP 1201756 (EP 2001124409)

EP 1201757 (EP 2001124410)

INTERNATIONAL PATENT CLASS: C07K-014/00; C12N-015/12; C12P-021/02;  
C12N-015/62

Searcher :                      Shears                      571-272-2528

## NOTE:

No A-document published by EPO  
 LANGUAGE (Publication,Procedural,Application): English; English; English  
 FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	200221	849
CLAIMS B	(German)	200221	767
CLAIMS B	(French)	200221	939
SPEC B	(English)	200221	12623
Total word count - document A			0
Total word count - document B			15178
Total word count - documents A + B			15178

4/3,AB/24 (Item 24 from file: 348)  
 DIALOG(R)File 348:EUROPEAN PATENTS  
 (c) 2004 European Patent Office. All rts. reserv.

00443941

PROCESS FOR THE PREPARATION OF HUMAN DNASE  
 VERFAHREN ZUR HERSTELLUNG VON MENSCHLICHER DNASE  
 PROCEDE DE PREPARATION DE LA DNASE HUMAINE  
 PATENT ASSIGNEE:

GENENTECH, INC., (210480), 460 Point San Bruno Boulevard, South San  
 Francisco California 94080, (US), (applicant designated states:  
 AT;BE;CH;DE;ES;FR;GB;IT;LI;LU;NL;SE)

## INVENTOR:

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PATENT (CC, No, Kind, Date): EP 449968 A1 911009 (Basic)  
 EP 449968 B1 990224  
 WO 9007572 900712

APPLICATION (CC, No, Date): EP 90901443 891220; WO 89US5744 891220

PRIORITY (CC, No, Date): US 289958 881223; US 448038 891208

DESIGNATED STATES: AT; BE; CH; DE; ES; FR; GB; IT; LI; LU; NL; SE

INTERNATIONAL PATENT CLASS: C12N-009/16; C12N-015/55;

## NOTE:

No A-document published by EPO  
 LANGUAGE (Publication,Procedural,Application): English; English; English  
 FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	9907	542
CLAIMS B	(German)	9907	513
CLAIMS B	(French)	9907	648
SPEC B	(English)	9907	12755
Total word count - document A			0
Total word count - document B			14458
Total word count - documents A + B			14458

4/3,AB/25 (Item 25 from file: 348)  
 DIALOG(R)File 348:EUROPEAN PATENTS  
 (c) 2004 European Patent Office. All rts. reserv.

09/853367

00253410

BIOCHEMICAL REAGENT.

BIOCHEMISCHES REAGENZMITTEL.

REACTIF BIOCHIMIQUE.

PATENT ASSIGNEE:

3i RESEARCH EXPLOITATION LIMITED, (713732), 91 Waterloo Road, London SE1  
8XP, (GB), (applicant designated states: DE;FR;GB;IT)

INVENTOR:

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TANG, Ping, Woon, c/o Clinical Research Center, Allied Immunochemistry  
Research Group, Watford Road, Harrow, Middlesex, (GB)

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Eyles, Christopher Thomas et al (30483), W.P. THOMPSON & CO. High Holborn  
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PATENT (CC, No, Kind, Date): EP 282482 A1 880921 (Basic)  
EP 282482 B1 920122  
WO 8702777 870507

APPLICATION (CC, No, Date): EP 86906391 861024; WO 86GB659 861024

PRIORITY (CC, No, Date): GB 8526265 851024; GB 8526266 851024; GB 8526267  
851024

DESIGNATED STATES: DE; FR; GB; IT

INTERNATIONAL PATENT CLASS: G01N-033/531; G01N-033/547;

NOTE:

No A-document published by EPO

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	EPBBF1	1123
CLAIMS B	(German)	EPBBF1	1037
CLAIMS B	(French)	EPBBF1	1154
SPEC B	(English)	EPBBF1	6070
Total word count - document A			0
Total word count - document B			9384
Total word count - documents A + B			9384

Set	Items	Description
S5	108	AU=(MICHON F? OR MICHON, F?)
S6	693	AU=(LAUDE SHARP M? OR LAUDE SHARP, M? OR SHARP LAUDE M? OR SHARP LAUDE, M? OR SHARP M? OR LAUDE M? OR SHARP, M? OR LAUDE, M?)
S7	647	AU=(BLAKE, M? OR BLAKE M?)
S8	1	S5 AND S6 AND S7
S9	16	S5 AND (S6 OR S7)
S10	1	S6 AND S7
S11	1431	S5 OR S6 OR S7
S12	0	S11 AND S1
S13	16	(S8 OR S9 OR S10) NOT S3
S14	12	RD (unique items)

>>>No matching display code(s) found in file(s): 65, 113

14/3,AB/1 (Item 1 from file: 65)  
DIALOG(R)File 65:Inside Conferences  
(c) 2004 BLDSC all rts. reserv. All rts. reserv.

03897685 INSIDE CONFERENCE ITEM ID: CN040959221

Searcher : Shears 571-272-2528

Comparison of group B meningococcal conjugate vaccines in adult and infant rhesus monkeys: rPorB versus tetanus toxoid as protein carrier

Fusco, P. C.; Farley, E. K.; Bruge, J.; Danve, B.; Gibelin, N.;

**Blake, M. S.; Michon, F.; Schulz, D.**

CONFERENCE: International pathogenic Neisseria conference-11th

ABSTRACTS OF THE INTERNATIONAL PATHOGENIC NEISSERIA CONFERENCE , 1998;

11TH P: 150

Paris, EDK, 1998

ISBN: 2842540158

LANGUAGE: English DOCUMENT TYPE: Conference Selected abstracts

CONFERENCE LOCATION: Nice, France 1998; Nov (199811) (199811)

14/3,AB/2 (Item 2 from file: 65)

DIALOG(R)File 65:Inside Conferences

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02126507 INSIDE CONFERENCE ITEM ID: CN022241981

Phagocytic, Serological, and Protective Properties of Streptococcal Group A Carbohydrate Antibodies

Zabriskie, J. B.; Poon-King, T.; **Blake, M. S.; Michon, F.**

CONFERENCE: Streptococci and streptococcal diseases: Streptococci and the host -Lancefield international symposium; 13th

ADVANCES IN EXPERIMENTAL MEDICINE AND BIOLOGY, 1997; VOL 418 P: 917-920

New York, London, Plenum Press, 1997

ISBN: 0306456036

LANGUAGE: English DOCUMENT TYPE: Conference Selected papers

CONFERENCE EDITOR(S): Horaud, T.

CONFERENCE LOCATION: Paris

CONFERENCE DATE: Sep 1996 (199609) (199609)

14/3,AB/3 (Item 3 from file: 65)

DIALOG(R)File 65:Inside Conferences

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01868581 INSIDE CONFERENCE ITEM ID: CN019327048

Candidate Group a Streptococcal Conjugate Vaccine Based on the Group a Polysaccharide

**Michon, F.;** Salvadori, L.; Zabriskie, J.; **Blake, M.**

CONFERENCE: Chemotherapy-International congress; 19th

CANADIAN JOURNAL OF INFECTIOUS DISEASES, 1995; VOL 6; NUMBER SUP/C P: 0664

Pulsus Group, 1995

ISSN: 1180-2332

LANGUAGE: English DOCUMENT TYPE: Conference Abstracts and programme

CONFERENCE LOCATION: Montreal, Canada

CONFERENCE DATE: Jul 1995 (199507) (199507)

NOTE:

Also known as 19ICC. Theme title: 100 years after Pasteur, a new age in chemotherapy

14/3,AB/4 (Item 1 from file: 440)

DIALOG(R)File 440:Current Contents Search(R)

(c) 2004 Inst for Sci Info. All rts. reserv.

10867261 References: 45

TITLE: The role of B/T costimulatory signals in the immunopotentiating activity of neisserial porin

AUTHOR(S): Mackinnon FG; Ho Y; **Blake MS**; **Michon F**; Chandraker A; Sayegh MH; Wetzler LM (REPRINT)

AUTHOR(S) E-MAIL: lwetzler@acs.bu.edu

CORPORATE SOURCE: Boston Univ, Maxwell Finland Lab Infect Dis, 774 Albany St/Boston//MA/02118 (REPRINT); Boston Univ, Maxwell Finland Lab Infect Dis, /Boston//MA/02118; Harvard Univ, Brigham & Womens Hosp, /Boston//MA/; N Amer Vaccine Inc, /Beltsville//MD/

PUBLICATION TYPE: JOURNAL

PUBLICATION: JOURNAL OF INFECTIOUS DISEASES, 1999, V180, N3 (SEP), P755-761

GENUINE ARTICLE#: 230HT

PUBLISHER: UNIV CHICAGO PRESS, 5720 SOUTH WOODLAWN AVE, CHICAGO, IL 60637-1603 USA

ISSN: 0022-1899

LANGUAGE: English DOCUMENT TYPE: ARTICLE

ABSTRACT: A T cell-dependent immune response to group C meningococcal capsular polysaccharide (CPS) can be elicited when CPS is conjugated to the class 3 neisserial porin (CPS-porin). Treatment of CPS-porin-immunized mice with B7-2 blocking monoclonal antibody (MAb) caused a dramatic reduction in the CPS-specific IgG response, treatment with anti-B7-1 MAb had no effect, and concurrent blockade of B7-1 and B7-2 resulted in a synergistic abrogation of the CPS-specific IgG response while the CPS IgM response was unaffected. Anti-CD40L MAb treatment caused a significant reduction of both CPS-specific IgG and IgM levels. In contrast, blockade of CTLA4 interactions resulted in increases in both CPS IgG and IgM responses in CPS-porin-immunized mice. These data support the hypothesis that the ability of neisserial porins to improve the immune response to poorly immunogenic antigens (e.g., polysaccharides) is related to porin-induced increases in B7-2 expression on antigen-presenting cells and enhanced B/T cell interactions.

14/3,AB/5 (Item 2 from file: 440)

DIALOG(R)File 440:Current Contents Search(R)

(c) 2004 Inst for Sci Info. All rts. reserv.

09903672 References: 26

TITLE: Preclinical studies on a recombinant group B meningococcal porin as a carrier for a novel Haemophilus influenzae type b conjugate vaccine

AUTHOR(S): Fusco PC (REPRINT); **Michon F**; LaudeSharp M; Minetti CASA; Huang CH; Heron I; **Blake MS**

CORPORATE SOURCE: N AMER VACCINE INC,12103 INDIAN CREEK COURT/BELTSVILLE//MD/20705 (REPRINT)

PUBLICATION TYPE: JOURNAL

PUBLICATION: VACCINE, 1998, V16, N19 (NOV), P1842-1849

GENUINE ARTICLE#: 126JQ

PUBLISHER: ELSEVIER SCI LTD, THE BOULEVARD, LANGFORD LANE, KIDLINGTON, OXFORD OX5 1GB, OXON, ENGLAND

ISSN: 0264-410X

LANGUAGE: English DOCUMENT TYPE: ARTICLE

ABSTRACT: In anticipation of future combination vaccines, a recombinant

class 3 porin (rPorB) of group B meningococci was evaluated as an alternative carrier protein for a Haemophilus influenzae type b (Hib) polyribosylribitol phosphate (PRP) conjugate vaccine. The use of rPorB may avoid undesirable immunologic interactions among vaccine components, including epitopic suppression from conventional carriers (e.g. tetanus toxoid [TT]), as well as provide desirable immunomodulatory effects. Rats were found to be more reliable and consistent than mice or guinea pigs for studying antibody responses to the Hib conjugates. Different Hib conjugates, Hib-TT and Hib-rPorB, consisting of PRP conjugated by reductive amination to TT or rPorB, were compared in rats. Commercially available, licensed vaccines, HbOC (HibTITER(R)) and PRP-T (OmniHIB(R)), were used as reference controls. Maximum geometric mean ELISA IgG titers were obtained in rats after only two doses, showing booster effects for all. However, Hib-rPorB immunization consistently resulted in responses that were 1-2 orders of magnitude greater than those for the other conjugates, including the licensed control vaccines. A maximum 4600-fold rise was observed for Hib-rPorB after two doses, and unlike the other conjugates, a 100% response rate was always achieved without adjuvant. These results warrant further investigation of Hib-rdPorB in combination with DTadP. (C) 1998 Elsevier Science Ltd. All rights reserved.

14/3,AB/6 (Item 3 from file: 440)  
 DIALOG(R) File 440:Current Contents Search(R)  
 (c) 2004 Inst for Sci Info. All rts. reserv.

09860253 References: 33

TITLE: Multivalent pneumococcal capsular polysaccharide conjugate vaccines employing genetically detoxified pneumolysin as a carrier protein

AUTHOR(S): **Michon F (REPRINT)**; Fusco PC; Minetti CASA; LaudeSharp M; Uitz C; Huang CH; D'Ambra AJ; Moore S; Remeta DP; Heron I; **Blake MS**

CORPORATE SOURCE: N AMER VACCINE INC, 13150 OLD COLUMBIA RD/COLUMBIA//MD/21046 (REPRINT); JOHNS HOPKINS UNIV, DEPT BIOL/BALTIMORE//MD/21218; JOHNS HOPKINS UNIV, CTR BIOCALORIMETRY/BALTIMORE//MD/21218

PUBLICATION TYPE: JOURNAL

PUBLICATION: VACCINE, 1998, V16, N18, SI (NOV), P1732-1741

GENUINE ARTICLE#: 122CJ

PUBLISHER: ELSEVIER SCI LTD, THE BOULEVARD, LANGFORD LANE, KIDLINGTON, OXFORD OX5 1GB, OXON, ENGLAND

ISSN: 0264-410X

LANGUAGE: English DOCUMENT TYPE: ARTICLE

ABSTRACT: A genetically detoxified pneumolysin, pneumolysoid (PLD), was investigated as a carrier protein for pneumococcal capsular polysaccharide (CPS). Such a CPS-PLD conjugate might provide additional protection against pneumococcal infections and resultant tissue damage. A single point mutant of pneumolysin was selected, which lacked measurable haemolytic activity, but exhibited the overall structural and immunological properties of the wild type. PLD conjugates were prepared from CPS serotypes 6B, 14, 19F and 23F by reductive amination. The structural features of free PLD, as well as the corresponding CPS-PLD, as assessed by circular dichroism spectroscopy, were virtually indistinguishable from the wild type counterpart. Each of the CPS monovalent and tetravalent conjugate formulations were examined for immunogenicity in mice at both 0.5 and 2.0  $\mu$ g CPS per dose. Tetanus toroid (TT) conjugates were similarly created and used for comparison. The

resultant conjugate vaccines elicited high levels of CPS-specific IgG that was opsonophagocytic for all serotypes tested. Opsonophagocytic titres, expressed as reciprocal dilutions resulting in 50% killing using HL-60 cells, ranged from 100 to 30000, depending on the serotype and formulation. In general, the lower dose and tetravalent formulations yielded the best responses for all serotypes (i.e., either equivalent or better than the higher dose and monovalent formulations). The PLD conjugates were also generally equivalent to or better in CPS-specific responses than the TT conjugates. In particular both the PLD conjugate and the tetravalent formulations induced responses for type 23F CPS that were approximately an order of magnitude greater than that of the corresponding TT conjugate and monovalent formulations. In addition, all the PLD conjugates elicited high levels of pneumolysin-specific IgG which were shown to neutralize pneumolysin-induced haemolytic activity in vitro. As a result of these findings, PLD appears to provide an advantageous alternative to conventional carrier proteins for pneumococcal multivalent CPS conjugate vaccines. (C) 1998 Published by Elsevier Science Ltd. All rights reserved.

14/3,AB/7 (Item 4 from file: 440)  
DIALOG(R) File 440:Current Contents Search(R)  
(c) 2004 Inst for Sci Info. All rts. reserv.

08146008 References: 37

TITLE: Preclinical evaluation of a novel group B meningococcal conjugate vaccine that elicits bactericidal activity in both mice and nonhuman primates

AUTHOR(S): Fusco PC; Michon F (REPRINT); Tai JY; Blake MS

CORPORATE SOURCE: N AMER VACCINE INC, 12103 INDIAN CREEK

CT/BELTSVILLE//MD/20705 (REPRINT); N AMER VACCINE  
INC,/BELTSVILLE//MD/20705

PUBLICATION TYPE: JOURNAL

PUBLICATION: JOURNAL OF INFECTIOUS DISEASES, 1997, V175, N2 (FEB), P364-372

GENUINE ARTICLE#: WF063

PUBLISHER: UNIV CHICAGO PRESS, 5720 S WOODLAWN AVE, CHICAGO, IL 60637

ISSN: 0022-1899

LANGUAGE: English DOCUMENT TYPE: ARTICLE

ABSTRACT: Group B meningococcal (GEM) conjugate vaccines were prepared using chemically modified N-propionylated polysialic acid, from Escherichia coli K1 polysaccharide capsule, coupled by reductive amination to tetanus toroid and purified recombinant GEM porin (rPorB). All conjugates elicited high antibody levels in mice with good booster responses. However, only rPorB conjugates elicited bactericidal activity specific against a broad spectrum of five different GEM serotypes. Bactericidal activity was completely inhibited by free N-propionylated polysaccharide, in baboons and rhesus monkeys, rPorB conjugates elicited high antibody titers, with IgG booster responses 9- to 15-fold higher than primary responses. Bactericidal activity increased 19- to 39-fold over preimmune values, using rabbit complement; increased bactericidal activity was also confirmed with human and monkey complement. IgG cross-reactivity for unmodified N-acetyl polysaccharide was <5% for 79% of mice and <10% for 80% of primates. These studies strongly suggest that the N-propionylated polysialic acid-rPorB conjugate is an excellent vaccine candidate for human use.

09/853367

14/3,AB/8 (Item 1 from file: 348)  
DIALOG(R)File 348:EUROPEAN PATENTS  
(c) 2004 European Patent Office. All rts. reserv.

01531256  
IMMUNOGENIC CONJUGATES OF LOW MOLECULAR WEIGHT HYALURONIC ACID WITH  
POLYPEPTIDE TOXINS  
IMMUNOGENE KONJUGATE AUS HYALURONAT NIEDEREN MOLEKULARGEWICHTS UND  
POLYPEPTID-TOXINEN

COMPOSITIONS IMMUNOGENES D'ACIDE HYALURONIQUE DE FAIBLE POIDS MOLECULAIRE  
ET METHODES DE PREVENTION, DE TRAITEMENT ET DE DIAGNOSTIC D'INFECTIONS  
ET DE MALADIES CAUSEES PAR LES STREPTOCOQUES DES GROUPES A ET C

PATENT ASSIGNEE:

BAXTER INTERNATIONAL INC., (318505), One Baxter Parkway, Deerfield,  
Illinois 60015, (US), (Applicant designated States: all)  
Baxter Healthcare S.A., (3374412), Hertistrasse 2 Wallisellen, Kanton,  
8306 Zurich, (CH), (Applicant designated States: all)

INVENTOR:

MICHON, Francis, 4401 Rosedale Avenue, Bethesda, MD 20814, (US)  
MOORE, Samuel, 7425 Brandenburg Circle, Sykesville, MD 21784, (US)  
LAUDE-SHARP, Maryline, 16721 Gooseneck Terrace, Olney, MD 20832,  
(US)

BLAKE, Milan, 8521 Beauford Avenue, Fulton, MD 20759, (US)

LEGAL REPRESENTATIVE:

Bassett, Richard Simon et al (52833), Eric Potter Clarkson, Park View  
House, 58 The Ropewalk, Nottingham NG1 5DD, (GB)

PATENT (CC, No, Kind, Date): EP 1385554 A2 040204 (Basic)  
WO 2002092131 021121

APPLICATION (CC, No, Date): EP 2002750926 020510; WO 2002EP5310 020510

PRIORITY (CC, No, Date): US 853367 010511

DESIGNATED STATES: AT; BE; CH; CY; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI;  
LU; MC; NL; PT; SE; TR

EXTENDED DESIGNATED STATES: AL; LT; LV; MK; RO; SI

INTERNATIONAL PATENT CLASS: A61K-047/48; A61K-047/36

NOTE:

No A-document published by EPO

LANGUAGE (Publication,Procedural,Application): English; English; English

14/3,AB/9 (Item 2 from file: 348)  
DIALOG(R)File 348:EUROPEAN PATENTS  
(c) 2004 European Patent Office. All rts. reserv.

01066660  
PROCEDURES FOR THE EXTRACTION AND ISOLATION OF BACTERIAL CAPSULAR  
POLYSACCHARIDES FOR USE AS VACCINES OR LINKED TO PROTEINS AS CONJUGATES  
VACCINES

VERFAHREN ZUR EXTRAKTION UND ISOLIERUNG VON BAKTERIELLEN  
HULLPOLYSACCHARIDEN ZUR VERWENDUNG ALS VAKZINE ODER, AN PROTEINE  
GEKOPPELT, ALS KONJUGIERTE VAKZINE

PROCEDURES PERMETTANT D'EXTRAIRE ET D'ISOLER DES POLYSACCHARIDES  
CAPSULAIRES BACTERIENS DESTINES A ETRE UTILISES SEULS, EN TANT QUE  
VACCINS OU, LIES A DES PROTEINES, EN TANT QUE VACCINS CONJUGUES

PATENT ASSIGNEE:

NORTH AMERICAN VACCINE, INC., (1439713), 10150 Old Columbia Road,  
Columbia, MD 21046, (CA), (Applicant designated States: all)

Searcher : Shears 571-272-2528



INVENTOR:

**MICHON, Francis**, 4401 Rosedale Avenue, Bethesda, MD 20814, (US)  
**BLAKE, Milan**, 8521 Beauford Avenue, Fulton, MD 20759, (US)

LEGAL REPRESENTATIVE:

von Samson-Himmelstjerna, Friedrich R., Dipl.-Phys. et al (12469), SAMSON  
 & PARTNER Widenmayerstrasse 5, 80538 Munchen, (DE)  
 PATENT (CC, No, Kind, Date): EP 1051506 A1 001115 (Basic)  
 WO 9932653 990701

APPLICATION (CC, No, Date): EP 98966468 981223; WO 98US27375 981223

PRIORITY (CC, No, Date): US 68608 971223

DESIGNATED STATES: AT; BE; CH; CY; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI;  
 LU; MC; NL; PT; SE

EXTENDED DESIGNATED STATES: AL; LT; LV; MK; RO; SI

INTERNATIONAL PATENT CLASS: C12P-019/04; C12P-019/26; C08B-037/00

NOTE:

No A-document published by EPO  
 LANGUAGE (Publication,Procedural,Application): English; English; English

14/3,AB/10 (Item 3 from file: 348)  
 DIALOG(R)File 348:EUROPEAN PATENTS  
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01026643

IMMUNOGENIC CONJUGATES COMPRISING A GROUP B MENINGOCOCCAL PORIN AND AN  
 \$i(H. INFLUENZAE) POLYSACCHARIDE  
 IMMUNOGENE KONJUGATE AUS EINEM GRUPPE B MENINGOKOKKEN-PORIN UND EINEM  
 POLYSACCHARID AUS -I(H. INFLUENZAE)  
 CONJUGUES IMMUNOGENES RENFERMANT UNE PORINE MENINGOCOCCIQUE DU GROUPE B ET  
 UN POLYSACCHARIDE \$i(H. INFLUENZAE)

PATENT ASSIGNEE:

NORTH AMERICAN VACCINE, INC., (1439711), 12103 Indian Creek Court,  
 Beltsville, MD 20705, (US), (Applicant designated States: all)

INVENTOR:

**BLAKE, Milan, S.**, 8521 Beauford Drive, Fulton, MD 20759, (US)  
**MICHON, Francis**, 4401 Rosedale Avenue, Bethesda East, MD 20814,  
 (US)  
**FUSCO, Peter, C.**, 4205 Red Cedar Lane, Burtonsville, MD 20866, (US)  
**HERON, Iver**, , DECEASED, (US)

LEGAL REPRESENTATIVE:

Schlich, George William et al (75591), Mathys & Squire European Patent  
 Attorneys, 100 Gray's Inn Road, London WC1X 8AL, (GB)  
 PATENT (CC, No, Kind, Date): EP 1003549 A1 000531 (Basic)  
 WO 9903501 990128

APPLICATION (CC, No, Date): EP 98935762 980717; WO 98US14838 980717

PRIORITY (CC, No, Date): US 52952 970717; US 57795 970908

DESIGNATED STATES: AT; BE; CH; CY; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI;  
 LU; MC; NL; PT; SE

EXTENDED DESIGNATED STATES: AL; LT; LV; MK; RO; SI

INTERNATIONAL PATENT CLASS: A61K-039/102; A61K-039/095; A61K-039/385;  
 A61K-039/116; A01N-043/04; C07K-001/00

NOTE:

No A-document published by EPO  
 LANGUAGE (Publication,Procedural,Application): English; English; English

09/853367

14/3,AB/11 (Item 4 from file: 348)  
DIALOG(R) File 348:EUROPEAN PATENTS  
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00733926  
GROUP A STREPTOCOCCAL POLYSACCHARIDE IMMUNOGENIC COMPOSITIONS AND METHODS  
GRUPPE A STREPTOKOKKENPOLYSACCHARIDE IMMUNOGEN-ZUSAMMENSETZUNGEN UND  
VERFAHREN

COMPOSITIONS DE POLYSACCHARIDES DE STREPTOCOQUES DU GROUPE A AYANT DES  
PROPRIETES IMMUNOGENES ET PROCEDES ASSOCIES

PATENT ASSIGNEE:

THE ROCKEFELLER UNIVERSITY, (315601), 1230 York Avenue, New York New York  
10021-6399, (US), (Proprietor designated states: all)  
NORTH AMERICAN VACCINE, INC., (1439713), 10150 Old Columbia Road,  
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INVENTOR:

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ZABRISKIE, John, B., 1385 York Avenue, New York, NY 10021, (US)  
TAI, Joseph, Y., 1370 Cinnamon Drive, Fort Washington, PA 19034, (US)  
**MICHON, Francis**, 9735 Country Meadows Lane, Laurel, MD 20723, (US)

LEGAL REPRESENTATIVE:

Vossius, Volker, Dr. (12524), Dr. Volker Vossius, Patentanwaltskanzlei -  
Rechtsanwaltskanzlei, Holbeinstrasse 5, 81679 Munchen, (DE)

PATENT (CC, No, Kind, Date): EP 754055 A1 970122 (Basic)  
EP 754055 B1 000927

WO 9528960 951102

APPLICATION (CC, No, Date): EP 95916479 950420; WO 95US4973 950420

PRIORITY (CC, No, Date): US 231229 940421

DESIGNATED STATES: AT; BE; CH; DE; DK; ES; FR; GB; GR; IE; IT; LI; LU; MC;  
NL; PT; SE

EXTENDED DESIGNATED STATES: LT; SI

INTERNATIONAL PATENT CLASS: A61K-039/09; A61K-039/385; A61K-009/127

NOTE:

No A-document published by EPO  
LANGUAGE (Publication,Procedural,Application): English; English; English  
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	200039	1495
CLAIMS B	(German)	200039	1429
CLAIMS B	(French)	200039	1602
SPEC B	(English)	200039	9305
Total word count - document A			0
Total word count - document B			13831
Total word count - documents A + B			13831

14/3,AB/12 (Item 1 from file: 357)  
DIALOG(R) File 357:Derwent Biotech Res.  
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0241947 DBR Accession No.: 1999-12048 PATENT  
Extracting capsular polysaccharides from cellular components of  
Gram-positive and Gram-negative bacteria, useful for production of  
vaccines against bacterial infection - especially Streptococcus sp.

AUTHOR: Michon F; Blake M  
CORPORATE SOURCE: Beltsville, MD, USA.

Searcher : Shears 571-272-2528

09/853367

PATENT ASSIGNEE: North-American-Vaccine 1999  
PATENT NUMBER: WO 9932653 PATENT DATE: 19990701 WPI ACCESSION NO.:  
1999-418941 (1935)  
PRIORITY APPLIC. NO.: US 68608 APPLIC. DATE: 19971223  
NATIONAL APPLIC. NO.: WO 98US27375 APPLIC. DATE: 19981223  
LANGUAGE: English

ABSTRACT: A method for extracting capsular polysaccharides from cellular components of Gram-negative and Gram-positive bacteria (especially *Streptococcus* sp. ), by reacting the cellular components with a base reagent under basic conditions and separating the capsular polysaccharide from the cellular components, is new. Also claimed is a modified capsular polysaccharide produced by the process involving extracting Gram-negative or Gram-positive bacterial cellular components with a reagent containing a base. The extracted polysaccharides are useful for the production of vaccines containing the polysaccharides alone or conjugated to proteins (e.g. conjugated vaccines) to protect humans or animals against infection, typically by the strain of bacteria from which the capsular polysaccharide was isolated. They are especially used to induce production of antibodies which are cross-reactive with other pathogenic bacteria therefore producing protection against infection by these other bacteria. (52pp)

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11may04 11:08:04 User219783 Session D2015.3

09/853367

PATENT ASSIGNEE(S): (FIDI-N) FIDIA ADVANCED BIOPOLYMERS SRL; (FIDI-N)  
FIDIA ADVANCED BIOPOLYMERS; (FIDI-N) FIDIA FARM SPA  
COUNTRY COUNT: 83  
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 9845335	A1	19981015	(199847)*	EN	44
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC					
MW NL OA PT SD SE SZ UG ZW					
W: AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI					
GB GE GH GM GW HU ID IL IS JP KE KG KP KR KZ LC LK LR LS LT					
LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL					
TJ TM TR TT UA UG US UZ VN YU ZW					
AU 9874291	A	19981030	(199911)		
EP 971961	A1	20000119	(200009)	EN	
R: AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE					
IT 1291444	B	19990111	(200144)		
AU 738788	B	20010927	(200170)		
JP 2001522385	W	20011113	(200204)		35
IT 1300157	B	20000503	(200205)		
US 2002037874	A1	20020328	(200225)		
EP 971961	B1	20021204	(200303)	EN	
R: AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE					
DE 69809892	E	20030116	(200313)		
US 6579978	B1	20030617	(200341)		
ES 2189166	T3	20030701	(200347)		

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 9845335	A1	WO 1998-EP1973	19980403
AU 9874291	A	AU 1998-74291	19980403
EP 971961	A1	EP 1998-921429	19980403
		WO 1998-EP1973	19980403
IT 1291444	B	IT 1997-PD64	19970404
AU 738788	B	AU 1998-74291	19980403
JP 2001522385	W	JP 1998-542365	19980403
		WO 1998-EP1973	19980403
IT 1300157	B	IT 1998-PD22	19980210
US 2002037874	A1 Div ex	WO 1998-EP1973	19980403
	Div ex	US 1999-402510	19991206
		US 2001-972707	20011003
EP 971961	B1	EP 1998-921429	19980403
		WO 1998-EP1973	19980403
DE 69809892	E	DE 1998-609892	19980403
		EP 1998-921429	19980403
		WO 1998-EP1973	19980403
US 6579978	B1	WO 1998-EP1973	19980403
		US 1999-402510	19991206
ES 2189166	T3	EP 1998-921429	19980403

FILING DETAILS:

PATENT NO	KIND	PATENT NO
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Searcher : Shears 571-272-2528

AU 9874291	A Based on	WO 9845335
EP 971961	A1 Based on	WO 9845335
AU 738788	B Previous Publ.	AU 9874291
	Based on	WO 9845335
JP 2001522385	W Based on	WO 9845335
EP 971961	B1 Based on	WO 9845335
DE 69809892	E Based on	EP 971961
	Based on	WO 9845335
US 6579978	B1 Based on	WO 9845335
ES 2189166	T3 Based on	EP 971961

PRIORITY APPLN. INFO: IT 1998-PD22 19980210; IT  
1997-PD64 19970404

AN 1998-557476 [47] WPIDS

AB WO 9845335 A UPAB: 19981210

Novel sulphated **hyaluronic** acid derivatives (I) or their salts in which the glucosamine moieties are partially N-sulphated and optionally totally O-sulphated in position 6 are claimed.

Also claimed are: (1) a pharmaceutical composition comprising (I) or its salt in association with another pharmacologically active substance and a **carrier**; (2) a biomaterial comprising (I) or its salt optionally in association with a polymer and optionally further biologically active substances; (3) a biomedical object comprising a bypass, venous catheter, shunt, catheter, guide channel, probe, cardiac valve, artificial tendon, bone or cardiovascular replacement, contact lens, soft tissue replacement, replacement of animal origin, blood oxygenator, artificial kidney, heart, pancreas, liver, blood bag, syringe, surgical instrument, filtration system, laboratory instrument, container for culture or for the regeneration of cells or tissues or support for peptides, proteins or antibodies, coated with (I) or its salt; and (4) (I) or its salt or a mixture of (I) and optionally pharmacologically active substance, for the preparation of pharmaceutical compositions.

USE - (I) or its salt is used for treatment of inflammation, as an antiviral agent, for accelerating wound healing or burns, sores and skin ulcers, to favour angiogenesis, or for the preparation of **hyaluronic** acid esters with aliphatic, aromatic, araliphatic, cycloaliphatic or heteroaliphatic alcohol or crosslinked **hyaluronic** acid where part or all of the carboxy groups of D-**glucuronic** residue form inner esters or inter-molecular esters with the alcohol functions of the same or other polysaccharide chains (claimed). The compounds have anticoagulant and antithrombotic activities and are useful for preparation of biomaterials and coatings for biomedical objects.

ADVANTAGE - The method has reduced costs over prior art and the compounds have improved chemical physical properties over prior art.  
Dwg.0/0

L10 ANSWER 20 OF 33 WPIDS COPYRIGHT 2004 THOMSON DERWENT on STN

ACCESSION NUMBER: 1995-328286 [42] WPIDS

DOC. NO. NON-CPI: N1995-247043

DOC. NO. CPI: C1995-145675

TITLE: In vitro production of polysaccharide(s), especially **hyaluronic** acid - by enzymatic reactions using nucleotide-phosphate(s) for generation of

09/853367

DERWENT CLASS: sugar-nucleotide precursors.  
 INVENTOR(S): B04 B07 D16 D17 D21 D22 F01 P34  
 PATENT ASSIGNEE(S): LANSING, M; MARTINI, I; OREGAN, M; PREHM, P  
 COUNTRY COUNT: (FIDI-N) FIDIA ADVANCED BIOPOLYMERS SRL  
 PATENT INFORMATION: 62

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 9524497	A2	19950914	(199542)*	EN	56
RW: AT BE CH DE DK ES FR GB GR IE IT KE LU MC MW NL OA PT SD SE SZ UG					
W: AM AU BB BG BR BY CA CH CN CZ EE FI GB GE HU JP KE KG KP KR KZ LK LR LT LU LV MD MG MN MW MX NL NO NZ PL PT RO RU SD SE SG SI SK TJ TT UA US UZ VN					
AU 9520699	A	19950925	(199601)		
WO 9524497	A3	19951116	(199621)		
IT 1268954	B	19970318	(199740)		

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 9524497	A2	WO 1995-EP935	19950310
AU 9520699	A	AU 1995-20699	19950310
WO 9524497	A3	WO 1995-EP935	19950310
IT 1268954	B	IT 1994-PD42	19940311

FILING DETAILS:

PATENT NO	KIND	PATENT NO
AU 9520699	A Based on	WO 9524497

PRIORITY APPLN. INFO: IT 1994-PD42 19940311

AN 1995-328286 [42] WPIDS

AB WO 9524497 A UPAB: 19951026

The following are claimed: (A) production of **hyaluronic acid** (HA) in vitro comprising: (a) incubating a protein or protein mixture active in synthesising HA in a mixture containing uridine-5'-triphosphate (UTP), glucose-1-phosphate (G1P) and N-acetylglucosamine (NACGlc)-1-phosphate for the polymerisation of UDP-**glucuronic acid** (UDP-GlcA) and UDP-NACGlc to form HA and for formation of UDP-GlcA from UDP and G1P and the formation of UDP-NACGlc from UDP and NACGlc-1-phosphate, and (b) recovering the HA produced; (B) a process for producing cellulose in vitro comprising incubating cellulose synthase in a mixture containing UTP and G1P to synthesise cellulose and for the formation of UDP-glucose from UTP and G1P and recovering the cellulose; (C) a process for producing polymannuronic acid (PM) in vitro comprising incubating GPD-mannuronic acid polymerase in a mixture containing guanosine-5'-triphosphate (GTP) and mannose-1-phosphate (M1P) for the synthesis of PM and for the formation of GDP-mannuronic acid from GTP and M1P, and recovering the PM; (D) a process for producing chitin in vitro comprising incubating chitin synthase in a mixture containing UTP and NACGlc-1-phosphate for the synthesis of chitin and

for the formation of UDP-NACGlc from UTP and NACGlc-1-phosphate, and recovering the chitin; (E) a process for producing a polysaccharide (PS) in vitro comprising incubating the sugar-nucleotide synthase or polymerising enzyme for the PS in a mixture containing sugar precursors for the PS and nucleotide triphosphate **carriers** for the sugar precursors, for the synthesis of the PS and for the formation of sugar-nucleotide precursors from the nucleotide triphosphate **carriers** and the sugar precursors, and recovering the PS.

USE - The HA can be used in cosmetic and pharmaceutical compsns., e.g. in ophthalmology, tissue repair or rheumatology (claimed). It can also be used for the preparation of a biomaterial, e.g. a thread, film, membrane, gauze, sponge, microsphere, capsule or microcapsule, or a device for controlled release of a biologically or pharmaceutically active substance (claimed).

ADVANTAGE - The in vitro synthesis permits the production of polymers of extremely high purity and optimised physico-chemical characteristics. The methods provide for efficient biochemical recycling reactions to generate sugar-nucleotide precursors in situ.  
Dwg.6/10

L10 ANSWER 21 OF 33 WPIDS COPYRIGHT 2004 THOMSON DERWENT on STN  
 ACCESSION NUMBER: 1995-224081 [29] WPIDS  
 CROSS REFERENCE: 1999-180035 [15]  
 DOC. NO. CPI: C1995-103061  
 TITLE: Compsns. comprising **hyaluronate**  
 functionalised with di hydrazide - useful in  
 biological, medical, surgical and cosmetic  
 applications.  
 DERWENT CLASS: A96 B04 D21  
 INVENTOR(S): POUYANI, T; PRESTWICH, G D  
 PATENT ASSIGNEE(S): (UYN) UNIV NEW YORK STATE RES FOUND  
 COUNTRY COUNT: 57  
 PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 9515168	A1	19950608	(199529)*	EN	65
RW: AT BE CH DE DK ES FR GB GR IE IT KE LU MC MW NL OA PT SD SE SZ					
W: AM AT AU BB BG BR BY CA CH CN CZ DE DK ES FI GB GE HU JP KE KG KP KR KZ LK LT LU LV MD MG MN MW NL NO NZ PL PT RO RU SD SE SI SK TJ TT UA UZ VN					
AU 9512602	A	19950619	(199540)		
US 5616568	A	19970401	(199719)		24
US 5652347	A	19970729	(199736)		22

## APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 9515168	A1	WO 1994-US13580	19941123
AU 9512602	A	AU 1995-12602	19941123
US 5616568	A	US 1993-158996	19931130
US 5652347	A Div ex	US 1993-158996	19931130
		US 1995-484567	19950607

## FILING DETAILS:

	PATENT NO	KIND	PATENT NO
	AU 9512602	A Based on	WO 9515168
PRIORITY APPLN. INFO:	US 1993-158996		19931130; US
	1995-484567		19950607
AN	1995-224081 [29]	WPIDS	
CR	1999-180035 [15]		
AB	WO 9515168 A UPAB: 19990416		

Compsn. of matter comprises a **hyaluronate** functionalised with a dihydrazide.

Preparation of functionalised **hyaluronate** gels is also claimed.

The dihydrazide is especially of formula  $\text{H}_2\text{N}-\text{NH}-\text{CO}-\text{A}-\text{CO}-\text{NH}-\text{NH}_2$  (I). A = (un)substd. hydrocarbyl or heterohydrocarbyl of 0-20 carbons or heteroatoms (especially N, O or S).

The compsn. may also comprise at least one additional component (e.g. covalently bonded to an amine gp. of the dihydrazide) such as a fatty acid, topical medicament, perfume, UV absorbing agent, or drug (e.g. an antiinflammatory, antiviral, antifungal or antiproliferative agent).

Functionalised **hyaluronate** gels may be prepared by: (a) mixing **hyaluronate** with a dihydrazide in an aqueous solution to form a **hyaluronate**-dihydrazide mixture; (b) adding a carbodiimide to the mixture; and (c) allowing the mixture to react in the presence of carbodiimide under conditions which produce **hyaluronate** functionalised with dihydrazide.

USE - The compsns. form biocompatible gels or hydrogels and can serve as intermediates for attachment of bio-effecting agents, drugs, peptides, fluorocarbons, cosmetic agents, oxygen carriers, etc.

The compsns. may be administered to humans or animals, parenterally or topically.

ADVANTAGE - The preparation of modified **hyaluronic acid** does not compromise the mol. weight of the HA molecule, can be irreversible or reversible, provides a pendant functional gp. which can act as a versatile coupling site and gives gels with a strength and type which can be easily manipulated.

Dwg.0/4

ABEQ US 5616568 A UPAB: 19970512

A composition of matter comprising **hyaluronate** functionalised with a dihydrazide at **glucuronic acid** sites of the **hyaluronate**.

Dwg.0/0

ABEQ US 5652347 A UPAB: 19970909

A method for making a functionalised **hyaluronate** gel comprising;

(i) mixing **hyaluronate** with a dihydrazide in a substantially aqueous solution to form a **hyaluronate**-dihydrazide mixture;

(ii) adding a carbodiimide to the **hyaluronate**-dihydrazide mixture; and

(iii) allowing the **hyaluronate**-dihydrazide mixture to react in the presence of carbodiimide under conditions producing



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**hyaluronate** functionalised with dihydrazide.  
Dwg.0/4

L10 ANSWER 22 OF 33 WPIDS COPYRIGHT 2004 THOMSON DERWENT on STN  
ACCESSION NUMBER: 1995-060813 [08] WPIDS  
DOC. NO. CPI: C1995-027013  
TITLE: Compsns. containing **hyaluronic** acid  
fragments, useful to treat bone fracture - the  
fragments having specified chain length and a  
GlcNAc residue at the non-reducing end.  
DERWENT CLASS: B04  
INVENTOR(S): BUESCHKENS, D; LAGARDE, A E; TRESSEL, P S; XU, Z  
PATENT ASSIGNEE(S): (ALLX) ALLELIX BIOPHARMACEUTICALS INC  
COUNTRY COUNT: 46  
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 9501181	A1	19950112	(199508)*	EN	31
RW:	AT BE CH DE DK ES FR GB GR IE IT LU MC NL OA PT SE				
W:	AT AU BB BG BR BY CA CH CN CZ DE DK ES FI GB HU JP KP KR KZ				
	LK LU LV MG MN MW NL NO NZ PL PT RO RU SD SE SK UA UZ VN				
AU 9470667	A	19950124	(199520)		

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 9501181	A1	WO 1994-CA352	19940629
AU 9470667	A	AU 1994-70667	19940629

FILING DETAILS:

PATENT NO	KIND	PATENT NO
AU 9470667	A Based on	WO 9501181

PRIORITY APPLN. INFO: US 1993-84154 19930701  
AN 1995-060813 [08] WPIDS  
AB WO 9501181 A UPAB: 19950301

Compsn. comprises a **carrier** and, as active ingredient, a **hyaluronic** acid fragment (I) with a chain length of 5-16 (pref. 5-13, especially 7-11) and a configuration in which a N-acetyl-beta-D-glucosamine (GlcNAc) residue is at the non-reducing end. Also claimed is a compsn. comprising a **carrier** and (Ia): GlcNAc-(GlcUA-GlcNAc)<sub>n</sub>. n = 2,3,4,5,6 or 7; GlcUA = **glucuronic** acid.

USE - (I) are especially useful to effect localised bone repair, such as for treatment of bone fracture. The compsns. are also useful in bone grafting; to reconstruct bone defects such as arising from disease or congenitally; and as a sealant or filler to accelerate the repair of various osseous defects caused by disease or trauma, and which necessitate the bridging, reconstruction, recontouring or augmentation of hard tissues. The compsns. may also be used as a bone substitute to allografts, or as an agent to coat prosthesis.

ADVANTAGE - The stability of (I) offers advantages relative to

Searcher : Shears 571-272-2528

protein therapeutics in the design and engineering of osteotropic surfaces and layers, including those that utilise hydroxylapatites as composite biomaterials, and which are in use for artificial implants.

Dwg.0/4

L10 ANSWER 23 OF 33 MEDLINE on STN  
 ACCESSION NUMBER: 95035186 MEDLINE  
 DOCUMENT NUMBER: PubMed ID: 7524689  
 TITLE: Biotinylated **hyaluronic** acid: a new tool for probing **hyaluronate**-receptor interactions.  
 AUTHOR: Pouyani T; Prestwich G D  
 CORPORATE SOURCE: Department of Chemistry, University at Stony Brook, New York 11794-3400.  
 SOURCE: Bioconjugate chemistry, (1994 Jul-Aug) 5 (4) 370-2. Journal code: 9010319. ISSN: 1043-1802.  
 PUB. COUNTRY: United States  
 DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)  
 LANGUAGE: English  
 FILE SEGMENT: Priority Journals  
 ENTRY MONTH: 199412  
 ENTRY DATE: Entered STN: 19950110  
 Last Updated on STN: 19960129  
 Entered Medline: 19941223

AB **Hyaluronic** acid (HA) is a linear polysaccharide composed of repeating disaccharide units of D-**glucuronic** acid (GlcUA) and N-acetyl-D-glucosamine (GlcNAc). **Hyaluronate** plays an important role in many biological processes as mediated by its interactions with a number of HA-binding proteins (the "hyaladherins") and with the cell surface HA-receptor, CD44. Studies of **hyaluronate**-hyaladherin interactions would be greatly facilitated by the availability of molecular probes derived from HA. We recently reported a convenient chemical modification of **hyaluronate** that introduces multiple pendant amine functionalities onto the HA carboxylate residues. We now report the preparation of biotinylated **hyaluronic** acid (molecular weight =  $1.2 \times 10^6$  Da) as a probe for histochemical and immunochemical characterization of HA-binding proteins. Approximately one-third of the available HA glucuronate residues could be readily biotinylated in high molecular weight HA.

L10 ANSWER 24 OF 33 MEDLINE on STN DUPLICATE 2  
 ACCESSION NUMBER: 95035181 MEDLINE  
 DOCUMENT NUMBER: PubMed ID: 7948100  
 TITLE: Functionalized derivatives of **hyaluronic** acid oligosaccharides: drug **carriers** and novel biomaterials.  
 AUTHOR: Pouyani T; Prestwich G D  
 CORPORATE SOURCE: Department of Chemistry, University at Stony Brook, New York 11794-3400.  
 CONTRACT NUMBER: RR05547A (NCRR)  
 SOURCE: Bioconjugate chemistry, (1994 Jul-Aug) 5 (4) 339-47. Journal code: 9010319. ISSN: 1043-1802.  
 PUB. COUNTRY: United States  
 DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

09/853367

LANGUAGE: English  
FILE SEGMENT: Priority Journals  
ENTRY MONTH: 199412  
ENTRY DATE: Entered STN: 19950110  
Last Updated on STN: 19950110  
Entered Medline: 19941223

AB Oligosaccharides derived from **hyaluronic** acid (HA), a naturally occurring linear polysaccharide composed of repeating disaccharide units of N-acetyl-D-glucosamine and D-**glucuronic** acid, can be chemically modified to introduce a pendant amine-like functionality (patent application pending). Covalent attachment of steroidal and nonsteroidal antiinflammatory drugs to functionalized HA oligosaccharides was accomplished with the incorporation of hydrolytically labile bonds. Further derivatization of the pendant group with homobifunctional crosslinkers allowed the introduction of covalent crosslinks. Chemically-modified HA oligosaccharides were unambiguously characterized in solution by high-resolution 1H NMR spectroscopy.

L10 ANSWER 25 OF 33 MEDLINE on STN

ACCESSION NUMBER: 95146448 MEDLINE

DOCUMENT NUMBER: PubMed ID: 7844061

TITLE: On the beta-glucuronidase binding protein (BGBP) of microorganisms. Its purification, the antiserum preparation against that and its localization in leproma and the other infectious lesions shown by immunohistologic method.

AUTHOR: Matsuo E; Komatsu A; Maekawa S; Furuno Y; Matsushita A; Sumiishi A; Sasaki N; Skinsnes O K

CORPORATE SOURCE: Department of Pathology, Kyorin University School of Medicine.

SOURCE: Nippon Rai Gakkai zasshi, (1994 Jul) 63 (2) 35-46.  
Journal code: 7901165. ISSN: 0386-3980.

PUB. COUNTRY: Japan

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 199503

ENTRY DATE: Entered STN: 19950316

Last Updated on STN: 19950316

Entered Medline: 19950308

AB Our previous studies suggested that *M. leprae* (ML) grow in peripheral nerves and lepra cells because ML metabolize **hyaluronic** acid (HA), and use its component for their growth by the aid of host enzyme combined to the bacilli derived beta-glucuronidase binding protein (BGBP). In this study, therefore, we examined the method to purify BGBP from a mycobacterium HI-75 originally separated from a leproma and cultured by modified Ogawa's medium containing split products of HA (**glucuronic** acid and N-acetylglucosamine). The distribution of BGBP in leproma and the other lesions consisting of hepatitis B virus infected liver and *M. avium*-intracellulare infected lung tissue were also immunohistologically examined. As the result, the best method to get BGBP was preparatory electrophoresis in the final step of the purification and not the molecular sieving. The BGBP was actually proven in leproma and the other infected tissues as

described, indicating the abilities of these microorganisms to utilize the metabolic machinery of the host with the similar ways to that of ML.

L10 ANSWER 26 OF 33 DISSABS COPYRIGHT (C) 2004 ProQuest Information and Learning Company; All Rights Reserved on STN  
 ACCESSION NUMBER: 94:28358 DISSABS Order Number: AAR9417806  
 TITLE: FUNCTIONALIZED DERIVATIVES OF **HYALURONIC**  
 ACID AS DRUG **CARRIERS** AND AS NOVEL  
 BIOMATERIALS (CELL ADHESION, RHEUMATOID ARTHRITIS)  
 AUTHOR: POUYANI, TARA [PH.D.]  
 CORPORATE SOURCE: STATE UNIVERSITY OF NEW YORK AT STONY BROOK (0771)  
 SOURCE: Dissertation Abstracts International, (1993) Vol. 55,  
 No. 2B, p. 429. Order No.: AAR9417806. 191 pages.  
 DOCUMENT TYPE: Dissertation  
 FILE SEGMENT: DAI  
 LANGUAGE: English  
 ENTRY DATE: Entered STN: 19940804  
 Last Updated on STN: 19940804

AB **Hyaluronic** acid (HA) is a viscoelastic biomaterial consisting of repeating disaccharide units of D-**glucuronic** acid (GlcUA) and N-acetyl-D-glucosamine (GlcNAc). It is a major component of the extracellular matrix, and is known to participate in a number of important biological processes. Its unique rheological properties, biocompatibility and non-immunogenicity have made it a potentially interesting biomaterial for various medical applications.

The first part of this dissertation describes a detailed investigation of the reaction of **hyaluronate** with 1-ethyl-3-(3-(dimethylamino)propyl)carbodiimide (EDC) using solid state NMR and isotopic labeling techniques. The results of this study support the formation of isomeric N-acylureas in unequal amounts.

The second part of this dissertation describes the development of a convenient chemical methodology for the functionalization of **hyaluronate** with aliphatic dihydrazides using HA oligosaccharides of defined length as a model system. The pendant hydrazido group was then exploited to covalently attach steroidal and non-steroidal antiinflammatory drugs to the HA backbone via hydrolytically and enzymatically labile bonds. These **hyaluronate** derivatives have the potential to be used as drug **carriers**.

The chemical methodology developed on HA oligosaccharides was extended to high MW HA (1.5  $\times 10^6$  daltons) to provide hydrazido-functionalized **hyaluronate**. The pendant hydrazido group served as an attachment point for the introduction of reversible and irreversible covalent crosslinks into the HA molecule to give a series of novel hydrogels. These hydrogels were characterized by  $^{13}\text{C}$  CP-MAS solid state NMR. Their surface morphology was studied by scanning electron microscopy (SEM) which provided evidence for the formation of highly porous three-dimensional structures. These novel biomaterials have the potential to be used as three-dimensional matrices for the controlled release of biologically active molecules, as biodegradable scaffolds for cellular adhesion and proliferation, and as injectable substances for the treatment of rheumatoid arthritis.

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L10 ANSWER 27 OF 33 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on  
STN

ACCESSION NUMBER: 1993:336525 BIOSIS  
DOCUMENT NUMBER: PREV199345031250  
TITLE: Functionalized derivatives of **hyaluronic**  
acid (HA) as drug **carriers** and as novel  
biomaterials.  
AUTHOR(S): Pouyani, Tara; Prestwich, Glenn D.  
CORPORATE SOURCE: Dep. Chem., State Univ. New York, Stony Brook, NY  
11794-3400, USA  
SOURCE: FASEB Journal, (1993) Vol. 7, No. 7, pp. A1260.  
Meeting Info.: Joint Meeting of the American Society  
for Biochemistry and Molecular Biology and American  
Chemical Society Division of Biological Chemistry.  
San Diego, California, USA. May 30-June 3, 1993.  
CODEN: FAJOEC. ISSN: 0892-6638.  
DOCUMENT TYPE: Conference; (Meeting)  
LANGUAGE: English  
ENTRY DATE: Entered STN: 16 Jul 1993  
Last Updated on STN: 17 Jul 1993

L10 ANSWER 28 OF 33 WPIDS COPYRIGHT 2004 THOMSON DERWENT on STN

ACCESSION NUMBER: 1991-052809 [08] WPIDS  
CROSS REFERENCE: 1988-184235 [27]; 1992-341636 [42]; 1994-170047  
[21]; 1995-312555 [41]; 1997-065112 [06];  
1997-247123 [23]; 1999-033473 [03]  
DOC. NO. CPI: C1991-022416  
TITLE: Treatment of skin conditions - using compsn. containing  
alpha hydroxy acid, alpha keto acid or polymeric  
hydroxyacid(s) and amphoteric agent.  
B05 D21 E19  
DERWENT CLASS:  
INVENTOR(S): VAN SCOTT, E J; YU, R J  
PATENT ASSIGNEE(S): (VSCO-I) VAN SCOTT E J; (YURJ-I) YU R J; (YURR-I)  
YU R J; (TRIS-N) TRISTRATA TECHNOLOGY INC; (TRIS-N)  
TRISTRATA INC; (TRIS-N) TRISTRATA TECHNOLOGY  
COUNTRY COUNT: 17  
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
EP 413528	A	19910220	(199108)*		34
R: AT BE CH DE ES FR GB GR IT LI LU NL SE					
AU 9059139	A	19910221	(199115)		
CA 2019273	A	19910215	(199117)		
US 5091171	A	19920225	(199211)		10
US 5385938	A	19950131	(199511)		19
AU 660917	B	19950713	(199535)		
US 5091171	B1	19950926	(199544)		7
EP 413528	B1	19951115	(199550)	EN	47
R: AT BE CH DE DK ES FR GB GR IT LI LU NL SE					
DE 69023574	E	19951221	(199605)		
AU 9533110	A	19960215	(199614)		
ES 2081936	T3	19960316	(199618)		
US 5637615	A	19970610	(199729)		18
US 5643952	A	19970701	(199732)		19

Searcher : Shears 571-272-2528

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US 5643953	A	19970701 (199732)	19
US 5643961	A	19970701 (199732)	18
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US 5643963	A	19970701 (199732)	19
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US 5648395	A	19970715 (199734)	19
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US 5654340	A	19970805 (199737)	19
US 5656665	A	19970812 (199738)	20
US 5656666	A	19970812 (199738)	19
US 5670542	A	19970923 (199744)	19
US 5670543	A	19970923 (199744)	19
US 5674899	A	19971007 (199746)	19
US 5674903	A	19971007 (199746)	19
US 5677339	A	19971014 (199747)	17
US 5677340	A	19971014 (199747)	17
US 5681853	A	19971028 (199749)	18
US 5684044	A	19971104 (199750)	17
US 5690967	A	19971125 (199802)	19
US 5702688	A	19971230 (199807)	20
US 5716992	A	19980210 (199813)	19
US 5827882	A	19981027 (199850)	
AU 701962	B	19990211 (199918)	
US 5883128	A	19990316 (199918)	
US 5886041	A	19990323 (199919)	
US 5886042	A	19990323 (199919)	
US 6060512	A	20000509 (200030)	
US 6191167	B1	20010220 (200112) #	
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CA 2337750	A1	19910215 (200134)	EN
CA 2337750	C	20021015 (200282)	EN
US 2003083380	A1	20030501 (200331)	

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
EP 413528	A	EP 1990-308828	19900810
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US 5385938	A	US 1986-945680	19861223
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	Cont of	US 1992-840149	19920224
		US 1992-925877	19920807
AU 660917	B	AU 1990-59139	19900718
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EP 413528	B1	EP 1990-308828	19900810
DE 69023574	E	DE 1990-623574	19900810

Searcher :                      Shears                      571-272-2528

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AU 9533110	A	Div ex	EP 1990-308828	19900810
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US 5827882	A	CIP of	US 1986-945680	19861223
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AU 701962	B	Div ex	AU 1990-59139	19900718
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US 5883128	A	Div ex	US 1989-393749	19890815
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FILING DETAILS:

PATENT NO	KIND	PATENT NO
US 5385938	A Div ex	US 5091171
AU 660917	B Previous Publ.	AU 9059139
DE 69023574	E Based on	EP 413528
ES 2081936	T3 Based on	EP 413528
US 5637615	A Div ex	US 5091171
US 5643952	A Div ex	US 5091171
US 5643953	A Div ex	US 5091171
US 5643961	A Div ex	US 5091171
US 5643962	A Div ex	US 5091171
US 5643963	A Div ex	US 5091171
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PRIORITY APPLN. INFO: US 1989-393749 19890815; US

1986-945680	19861223; US
1992-840149	19920224; US
1992-925877	19920807; US
1990-469738	19900119; US
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1995-467153	19950606; US
1995-466770	19950606; US
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1995-465695	19950606; US

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1997-998864 19971229; US  
 1997-998866 19971229; US  
 1997-998871 19971229; US  
 1998-185608 19981104; US  
 1999-255702 19990223; US  
 2000-513225 20000225; US  
 2000-729981 20001206

AN 1991-052809 [08] WPIDS  
 CR 1988-184235 [27]; 1992-341636 [42]; 1994-170047 [21]; 1995-312555 [41]; 1997-065112 [06]; 1997-247123 [23]; 1999-033473 [03]  
 AB EP 413528 A UPAB: 20030516  
 A pharmaceutical or cosmetic compsn. comprises (a) an amphoteric or pseudoamphoteric agent (I) and (b) an alpha hydroxyacid, an alpha ketoacid or a related cpd. in a vehicle for topical application. Also claimed is a compsn. comprising a cosmetic or pharmaceutical agent (II) in an amphoteric or pseudoamphoteric system comprising an alpha hydroxyacid, an alpha ketoacid or a related cpd. in a vehicle for topical treatment of cosmetic conditions or medical disorders.  
 USE/ADVANTAGE - Use of (I) in the compsns. raises the pH so that the compsns. are less or non-irritating to the skin and they can react with alpha hydroxy or ketoacid molecules to form a quadruple ionic complex which acts as a buffering system to control the release of alpha hydroxy or ketoacid into the skin thereby eliminating skin irritation and still retaining therapeutic efficacy. m  
 Dwg.0/0

ABEQ US 5091171 A UPAB: 19930928  
 Pharmaceutical compsn. comprises one or more amphoteric aminoacids, peptides, proteins and/or their derivs., e.g. creatine, amino aldonic acids, amino uronic acids, neuraminic acid, desulphated heparin, deacetylated **hyaluronic** acid or chondroitin, phosphatidyl serine, sphingomyelin, etc; at least one 2-hydroxy acid of formula  $RR'C(OH)COOH$  and/or 2-ketoacid of formula  $RCOCOOH$  or their derivs., where R and R' are each H or opt. substd. aliphatic, alicyclic or aromatic gps; and at least one of the related cpds. ascorbic acid, quinic acid, isocitric acid, tropic acid, trethocanic acid, 3-chlorolactic acid, cerebronic acid, citramalic acid, agaricic acid, 2-hydroxynervonic acid, aleuritic acid and pantoic acid; dispersed with the usual **carriers** and opt. additives.  
 USE - The prods. are prophylactics and therapeutics for cosmetic and dermatological conditions, e.g. dry skin, dandruff, psoriasis, acne, eczema, pruritus, warts, ageing skin, etc.

ABEQ US 5385938 A UPAB: 19950322  
 Method of visibly reducing facial wrinkles of human skin comprises topical admin. of compsn. of 2-hydroxyethanoic acid (glycolic acid) or its salt pref. with an organic base. Application is periodically until wrinkles are reduced e.g. daily for 2-4 months. Compsn. includes **carrier** and may be lotion, ointment, cream, gel or soln.  
 ADVANTAGE - Treats actinic or sun damage, also dry skin, dandruff, acne, melanomas, warts, hyperpigmented and hyperkeratonic skin, dermatoses, and changes due to ageing.  
 Dwg.0/0

ABEQ US 5091171 B UPAB: 19970820  
 Preventive as well as therapeutic treatment to alleviate cosmetic

conditions and symptoms of dermatologic disorders with amphoteric compositions containing alpha hydroxy acids, alpha ketoacids, related compounds or polymeric forms of hydroxyacids is disclosed. The cosmetic conditions and the dermatological disorders in which the amphoteric compositions and the polymeric compounds may be useful include, dry skin, dandruff, acne, keratoses, psoriasis, eczema, pruritus, age spots, lentigines, melasma, wrinkles, warts, blemished skin, hyper-pigmented skin, hyper-keratotic skin, inflammatory dermatoses, skin changes associated with ageing, and skin requiring cleansers.

(Patentability of claims 1-7, 9-11 and 13-27 is confirmed; claims 8 and 12 were previously cancelled).

Dwg.0/0

ABEQ EP 413528 B UPAB: 19951215

A pharmaceutical or cosmetic composition for topical application, said composition comprising an active ingredient selected from alpha hydroxyacids, alpha ketoacids, dimeric and polymeric forms of hydroxyacids, ascorbic acid, quinic acid, isocitric acid, tropic acid, trethocanic acid, 3-chlorolactic acid, cerebronic acid, citramalic acid, agaricic acid, 2-hydroxynervonic acid, aleuritic acid, pantoic acid, lactones derived from said acids and salts. of said acids with organic bases or inorganic alkalis, in a pharmaceutically acceptable vehicle for topical application, characterised in that the composition comprises an amphoteric system consisting essentially of said active ingredient in combination with an amphoteric or pseudoamphoteric organic compound, which acts to raise the overall pH of the composition.

Dwg.0/0

ABEQ US 5637615 A UPAB: 19970716

Visibly reducing a human skin wrinkle comprises topically applying to the wrinkle a composition comprising tropic acid or a topically effective salt, in an amount and for a period of time sufficient to visibly reduce the wrinkle.

Dwg.0/0

ABEQ US 5643952 A UPAB: 19970806

Visibly reducing a human skin wrinkle comprising topically applying to the wrinkle a composition comprising 2-phenyllactic acid or a topically effective salt, in an amount and for a period of time sufficient to visibly reduce the wrinkle.

Dwg.0/0

ABEQ US 5643953 A UPAB: 19970806

Method of visibly reducing a human skin wrinkle comprising topically applying to said wrinkle a composition comprising 3-phenyl lactic acid or a topically effective salt thereof, in an amount and for a period of time sufficient to visibly reduce said wrinkle.

Dwg.0/0

ABEQ US 5643961 A UPAB: 19970806

Method of visibly reducing a human skin wrinkle comprising topically applying to said wrinkle a composition comprising malic acid or a topically effective salt thereof, in an amount and for a period of time sufficient to visibly reduce said wrinkle.

Dwg.0/0

ABEQ US 5643962 A UPAB: 19970806

Method of visibly reducing a human skin wrinkle comprising topically applying to the wrinkle a composition comprising glucoheptonic acid or a topically effective salt thereof, in an amount and for a period

of time sufficient to visibly reduce the wrinkle.

Dwg.0/0

ABEQ US 5643963 A UPAB: 19970806

Method of visibly reducing a human skin wrinkle comprising topically applying to said wrinkle a composition comprising isocitric acid or a topically effective salt thereof, in an amount and for a period of time sufficient to visibly reduce said wrinkle.

Dwg.0/0

ABEQ US 5385938 B UPAB: 19970820

Preventive as well as therapeutic treatment to alleviate cosmetic conditions and symptoms of dermatologic disorders with amphoteric compositions containing alpha hydroxy acids, alpha keto acids, related compounds or polymeric forms of hydroxyacids is disclosed. The cosmetic conditions and the dermatologic disorders in which the amphoteric compositions and the polymeric compounds may be useful include dry skin, dandruff, acne, keratoses, psoriasis, eczema, pruritus, age spots, lentigines, melasmas, wrinkles, warts, blemished skin, hyperpigmented skin, hyperkeratotic skin, inflammatory dermatoses, skin changes associated with aging, and skin requiring cleansers.

Dwg.0/0

ABEQ US 5648388 A UPAB: 19970820

Method of visibly reducing a human skin wrinkle comprising topically applying to said wrinkle a composition comprising methyl lactic acid or a topically effective salt thereof, in an amount and for a period of time sufficient to visibly reduce said wrinkle.

Dwg.0/0

ABEQ US 5648391 A UPAB: 19970820

Method of visibly reducing a human skin wrinkle comprises topically applying to a composition comprising galacturonic acid or a salt of it, or galacturonolactone to visibly reduce the wrinkle.

Dwg.0/0

ABEQ US 5648395 A UPAB: 19970820

Method of visibly reducing a human skin wrinkle comprising topically applying to said wrinkle a composition comprising tartaric acid or a topically effective salt thereof, in an amount and for a period of time sufficient to visibly reduce said wrinkle.

Dwg.0/0

ABEQ US 5650436 A UPAB: 19970828

Method of visibly reducing a human skin wrinkle comprising topically applying to said wrinkle a composition comprising galactonic acid or a topically effective salt thereof, or galactonolactone in an amount and for a period of time sufficient to visibly reduce said wrinkle.

Dwg.0/0

ABEQ US 5650437 A UPAB: 19970828

Visibly reducing a human skin wrinkle comprises topically applying to the wrinkle a composition comprising benzilic acid or a topically effective salt thereof, in an amount and for a period of time sufficient to visibly reduce the wrinkle.

Dwg.0/0

ABEQ US 5650440 A UPAB: 19970828

Method of visibly reducing a human skin wrinkle comprises topically applying to said wrinkle a composition comprising citramalic acid or a topically effective salt thereof, in an amount and for a period of time sufficient to visibly reduce the wrinkle.

Dwg.0/0

- ABEQ US 5652267 A UPAB: 19970909  
Method of visibly reducing a human skin wrinkle comprising topically applying to the wrinkle a composition comprising saccharic acid or a topically effective salt, or saccharolactone in an amount and for a period of time sufficient to visibly reduce the wrinkle.  
Dwg.0/0
- ABEQ US 5654336 A UPAB: 19970915  
A method for reversing or retarding the effect of aging on human facial skin, said effect being a change in the dermis that results from natural or innate aging or exposure to actinic radiation,  
said change in the dermis selected from the group consisting of a diminution in the number and diameter of elastic fibers in the papillary dermis, atrophy of the dermis, reduction in subcutaneous adipose tissue and deposition of abnormal elastic materials in the upper dermis,  
said method comprising topically applying to said facial skin a composition comprising glycolic acid, or a topically effective salt thereof, in an amount and for a period of time sufficient to reverse or prevent said change in the dermis, wherein said glycolic acid, or a topically effective salt thereof, is the principal ingredient responsible for said reversing or retarding.  
Dwg.0/0
- ABEQ US 5654340 A UPAB: 19970915  
Visibly reducing a human skin wrinkle comprising topically applying a composition comprising gulonic acid or its salt or gulonolactone.  
Dwg.0/0
- ABEQ US 5656665 A UPAB: 19970922  
Method of visibly reducing a human skin wrinkle comprising topically applying to said wrinkle a composition comprising quinic acid or a topically effective salt thereof, or quinolactone in an amount and for a period of time sufficient to visibly reduce said wrinkle.  
Dwg.0/0
- ABEQ US 5656666 A UPAB: 19970922  
Method of visibly reducing a human skin wrinkle comprising topically applying to said wrinkle a composition comprising ribonic acid or a topically effective salt thereof, or ribonolactone in an amount and for a period of time sufficient to visibly reduce said wrinkle.  
Dwg.0/0
- ABEQ US 5670542 A UPAB: 19971105  
Method of visibly reducing a skin wrinkle comprises topically applying a composition which comprises **glucuronic** acid or a salt thereof, or glucuronolactone to visibly reduce the wrinkle.  
Dwg.0/0
- ABEQ US 5670543 A UPAB: 19971105  
Method of visibly reducing a human skin wrinkle comprises applying to the wrinkle pantoic acid or a salt thereof, or pantolactone.  
Dwg.0/0
- ABEQ US 5674899 A UPAB: 19971119  
Method of visibly reducing a human skin wrinkle comprising applying lactic acid or a salt thereof.  
Dwg.0/0
- ABEQ US 5674903 A UPAB: 19971119  
Method of visibly reducing a human skin wrinkle comprising topically applying to the wrinkle citric acid or a salt thereof, in an amount and for a period of time sufficient to visibly reduce the wrinkle, wherein the wrinkle is a facial wrinkle.

Dwg.0/0

ABEQ US 5677339 A UPAB: 19971125

Method of visibly reducing a human skin wrinkle comprises topically applying to the wrinkle a composition comprising mandelic acid or one of its salts, for a period of time sufficient to visibly reduce the wrinkle.

Dwg.0/0

ABEQ US 5677340 A UPAB: 19971125

Method of visibly reducing a human skin wrinkle comprising topically applying to the wrinkle a composition comprising gluconic acid or a topically effective salt or gluconolactone in an amount and for a period of time sufficient to visibly reduce the wrinkle.

Dwg.0/0

ABEQ US 5681853 A UPAB: 19971211

A method for improved topical delivery of an alpha hydroxyacid or alpha keto acid, said method comprising the steps of: A. forming a topically acceptable composition by admixing an alpha hydroxy acid or alpha ketoacid with an amphoteric or pseudoamphoteric agent selected from the group consisting of dipeptides, creatine, aminoaldonic acid, aminouronic acids, lauryl aminopropylglycine, aminoaldaric acids, neuraminic acid, desulphated heparin, deacetylated **hyaluronic** acid, hyalobiuronic acid, chondrosine, deacetylated chondroitin, creatinine, cocoamphoglycine, cocoamphopropionate, cocoamphopropylsulphonate, phosphatidyl ethanolamine, glycine, alanine, valine, leucine, isoleucineserine, threonine, cysteine, cystine, methionine, asparagine, glutamine, arginine, lysine, 5-hydroxylysine, histidine, phenylalanine, tyrosine, tryptophan, 3-hydroxyproline, 4-hydroxyproline, proline, homocysteine, homocystine, homoserine, ornithine, citrulline, phosphatidylserine and sphingomyelin, and wherein

said alpha hydroxyacid is at least one member selected from the group consisting of alkyl alpha hydroxyacid, aralkyl and aryl alpha hydroxyacid, polyhydroxy alpha hydroxyacid and polycarboxylic alpha hydroxyacid having the following chemical structure:  $RaC(Rb)(OH)COOH$

wherein Ra and Rb independently are H, F, Cl, Br, alkyl, aralkyl or aryl group of saturated or unsaturated, isomeric or non-isomeric, straight or branched chain, having 1 to 25 carbon atoms, or cyclic form having 5 or 6 ring members, and in addition Ra and Rb may carry OH, CHO, COOH and alkoxy group having 1 to 9 carbon atoms, said alpha hydroxyacid existing as a free acid or lactone form, or in salt form with an organic base or an inorganic alkali, and as stereoisomers, and D, L, and DL forms when Ra and Rb are not identical;

said alpha ketoacid is at least one member selected from a group of compounds represented by the following chemical structure:  $RaCOCOORH$  (II)

wherein Ra is H, alkyl, aralkyl or aryl group of saturated or unsaturated, isomeric or non-isomeric, straight or branched chain, having 1 to 25 carbon atoms, or cyclic form having 5 or 6 ring members, and in addition Ra may carry F, Cl, Br, I, OH, CHO, COOH and alkoxy group having 1 to 9 carbon atoms, said alpha ketoacid existing as a free acid or in a salt form with an organic base or an inorganic alkali, wherein said composition is formulated to have a pH 1 less than or equal to 4.2; and B. applying said topically acceptable composition to the skin.

Dwg.0/0



ABEQ US 5684044 A UPAB: 19971217

A method for improved topical delivery of lactic acid, said method comprising the steps of:

A. forming a topically acceptable composition by admixing lactic acid and an amphoteric or pseudoamphoteric agent selected from the group consisting of glycine, alanine, valine, leucine, isoleucine, serine, threonine, cysteine, cystine, methionine, asparagine, glutamine, arginine, lysine, 5-hydroxylysine, histidine, phenylalanine, tyrosine, tryptophan, 3-hydroxyproline, 4-hydroxyproline, proline, homocysteine, homoserine, ornithine, citrulline, creatine, aminoalldonic acids, aminouronic acids, aminoalldaric acids, lauryl aminopropylglycine, neuraminic acid, desulphated heparin, deacetylated **hyaluronic** acid, hyalobiuronic acid, chondrosine deacetylated chondroitin, creatinine, 2-aminobutanoic acid, 4-aminobutanoic acid, 2-amino-2-methylpropanoic acid, 2-methyl-3-aminopropanoic acid, theanine, phenylglycine, canavanine, canaline, 4-hydroxyarginine, 4-hydroxyornithine, 2,4-diaminobutanoic acid, 2,3-diaminopropanoic acid, 2,6-diaminopinelic acid, 2-amino-3-phenylbutanoic acid, taurine, methionine sulphoxide, methionine sulphone, 3,5-diiodotyrosine, thyroxine, moniodotyrosine, pipelic acid, 4-aminopipelic acid, 4-methylproline, glycylglycine, carnosine, anserine, ophidine, homocarnosine, beta -alanylarginine, glutathione, ophthalmic acid, norophthalmic acid, cocoamphoglycine, cocoamphopropionate, cocoamphopropylsulphonate, phosphatidyl ethanolamine, phosphatidyl serine, and shingomyelin, and wherein said composition is formulated to have a pH less than or equal to 4.2; and B. applying said topically acceptable composition to the skin.

Dwg.0/0

ABEQ US 5690967 A UPAB: 19980112

A pharmaceutical or cosmetic compsn. comprises (a) an amphoteric or pseudoamphoteric agent (I) and (b) an alpha hydroxyacid, an alpha ketoacid or a related cpd. in a vehicle for topical application. Also claimed is a compsn. comprising a cosmetic or pharmaceutical agent (II) in an amphoteric or pseudoamphoteric system comprising an alpha hydroxyacid, an alpha ketoacid or a related cpd. in a vehicle for topical treatment of cosmetic conditions or medical disorders.

USE/ADVANTAGE - Use of (I) in the compsns. raises the pH so that the compsns. are less or non-irritating to the skin and they can react with alpha hydroxy or ketoacid molecules to form a quadruple ionic complex which acts as a buffering system to control the release of alpha hydroxy or ketoacid into the skin thereby eliminating skin irritation and still retaining therapeutic efficacy.

Dwg.0/0

ABEQ US 5702688 A UPAB: 19980216

A pharmaceutical or cosmetic compsn. comprises (a) an amphoteric or pseudoamphoteric agent (I) and (b) an alpha hydroxyacid, an alpha ketoacid or a related cpd. in a vehicle for topical application. Also claimed is a compsn. comprising a cosmetic or pharmaceutical agent (II) in an amphoteric or pseudoamphoteric system comprising an alpha hydroxyacid, an alpha ketoacid or a related cpd. in a vehicle for topical treatment of cosmetic conditions or medical disorders.

USE/ADVANTAGE - Use of (I) in the compsns. raises the pH so that the compsns. are less or non-irritating to the skin and they

can react with alpha hydroxy or ketoacid molecules to form a quadruple ionic complex which acts as a buffering system to control the release of alpha hydroxy or ketoacid into the skin thereby eliminating skin irritation and still retaining therapeutic efficacy.

Dwg.0/0

ABEQ US 5716992 A UPAB: 19980330

A pharmaceutical or cosmetic compsn. comprises (a) an amphoteric or pseudoamphoteric agent (I) and (b) an alpha hydroxyacid, an alpha ketoacid or a related cpd. in a vehicle for topical application. Also claimed is a compsn. comprising a cosmetic or pharmaceutical agent (II) in an amphoteric or pseudoamphoteric system comprising an alpha hydroxyacid, an alpha ketoacid or a related cpd. in a vehicle for topical treatment of cosmetic conditions or medical disorders.

USE/ADVANTAGE - Use of (I) in the compsns. raises the pH so that the compsns. are less or non-irritating to the skin and they can react with alpha hydroxy or ketoacid molecules to form a quadruple ionic complex which acts as a buffering system to control the release of alpha hydroxy or ketoacid into the skin thereby eliminating skin irritation and still retaining therapeutic efficacy.

Dwg.0/0

L10 ANSWER 29 OF 33 MEDLINE on STN  
 ACCESSION NUMBER: 91100024 MEDLINE  
 DOCUMENT NUMBER: PubMed ID: 1987071  
 TITLE: Binding of a Streptococcus mutans cationic protein to kidney in vitro.  
 AUTHOR: Choi S H; Stinson M W  
 CORPORATE SOURCE: Department of Microbiology, School of Medicine and Biomedical Sciences, State University of New York, Buffalo 14214.  
 CONTRACT NUMBER: R01-DE05696 (NIDCR)  
 SOURCE: Infection and immunity, (1991 Feb) 59 (2) 537-43.  
 Journal code: 0246127. ISSN: 0019-9567.  
 PUB. COUNTRY: United States  
 DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)  
 LANGUAGE: English  
 FILE SEGMENT: Priority Journals  
 ENTRY MONTH: 199102  
 ENTRY DATE: Entered STN: 19910329  
 Last Updated on STN: 20000303  
 Entered Medline: 19910220

AB An 8-kDa protein, with binding activity for heparin and heparan sulfate of basal laminae of animal tissues, was isolated from Streptococcus mutans MT703 and purified to homogeneity. Binding of radioiodinated 8-kDa protein to rabbit kidney tissue in vitro showed a high degree of specificity, as indicated by saturation kinetics, time dependence, and competitive inhibition by unlabeled protein. Binding activity for kidney tissue was competitively inhibited by selected glycosaminoglycans and polyanions in the following order: heparin greater than dextran sulfate greater than heparan sulfate greater than chondroitin sulfate greater than lipoteichoic acid greater than keratan sulfate greater than **hyaluronic** acid. Binding of the streptococcal protein to rabbit kidney tissue was also strongly inhibited by protamine sulfate, polylysine, and a

random copolymer of lysine and alanine. Among the monosaccharides tested at 50 mM, glucosamine 2,3- or 2,6-disulfate, **glucuronic** acid, glucose 6-phosphate, and glucose 6-sulfate inhibited 50% or more of the binding activity, whereas N-acetylglucosamine 3-sulfate, glucosamine 6-sulfate, N-acetyl-glucosamine, N-acetylgalactosamine, N-acetylneuraminic acid, and a selection of neutral sugars were not inhibitory. The heparin-binding protein was detected on the cell wall of *S. mutans* and in the culture medium following growth. Several other species of streptococci produce an immunologically related protein of similar size.

L10 ANSWER 30 OF 33 DISSABS COPYRIGHT (C) 2004 ProQuest Information and Learning Company; All Rights Reserved on STN  
 ACCESSION NUMBER: 89:30160 DISSABS Order Number: AAR9012971  
 TITLE: SYNTHESSES AND PROPERTIES OF **HYALURONIC** ACID  
 MODIFIED BY DESIGNED CARBODIIMIDES  
 AUTHOR: KUO, JING-WEN [PH.D.]; PRESTWICH, GLENN D. [advisor]  
 CORPORATE SOURCE: STATE UNIVERSITY OF NEW YORK AT STONY BROOK (0771)  
 SOURCE: Dissertation Abstracts International, (1989) Vol. 50, No. 12B, p. 5626. Order No.: AAR9012971. 146 pages.  
 DOCUMENT TYPE: Dissertation  
 FILE SEGMENT: DAI  
 LANGUAGE: English  
 ENTRY DATE: Entered STN: 19921118  
 Last Updated on STN: 19921118

AB **Hyaluronic** acid (HA) is a linear polysaccharide with repeating disaccharide units of **glucuronic** acid and N-acetylglucosamine and is found extracellularly in most tissues. The biological functions of HA such as cell cushioning, and its biomaterial value as surgical implant are attributed to its remarkable viscoelastic property determined by its large hydrodynamic volume as well as its high molecular weight. The potential of HA as a drug delivery vehicle is perceived from the specific interaction between HA and cell receptors.

Chemical modifications of **hyaluronic** acid have been investigated. HA-carbodiimide reaction is identified as a mild, efficient and specific chemical method for HA modification. The reactions between the carboxylate of HA and the carbodiimide functional groups produce the acylureas as HA derivatives which are verified by  $^1\text{H-NMR}$ . The designed carbodiimides featured by aliphatic chains, aromatic rings, amines, amides and carbamates are synthesized from the thiourea precursors. The thioureas are obtained from the reactions of the corresponding primary amines and isothiocyanates. The aromatic and aliphatic biscarbodiimides are synthesized in a similar way. The reactions of the designed carbodiimides with HA are performed in aqueous solution at pH 4.75 and the reactivities of different carbodiimides are studied by comparing the proton uptake. The synthesis of a carbodiimide containing a trifluoroacetyl-protected amine and its subsequent use to make amine-functionalized HA are described.

The structure-property relations of HA and modified HA are investigated by comparing the intrinsic viscosities of the carbodiimide-modified HA and the unmodified HA. The significant increase of the intrinsic viscosities of HA after modification and NMR spectra line broadening of the modified HA containing long

hydrophobic side chains appear to be related to the increased extendedness and rigidity of the macromolecular chains of the HA-acylureas. The hydrophobicity may also contribute to the enhanced affinity of the modified HA to hydrophobic drugs. The biscarbodiimide crosslinked HA forms a stable hydrogel which suggests its potential as a drug **carrier** with a long half life in vivo. The general principles and relationships of intrinsic viscosity, hydrodynamic volume and molecular weight of linear polymers are discussed. The approaches of drug attachment to the amine-functionalized HA are envisioned.

L10 ANSWER 31 OF 33 MEDLINE on STN  
 ACCESSION NUMBER: 88256297 MEDLINE  
 DOCUMENT NUMBER: PubMed ID: 3290104  
 TITLE: Heparin-inhibitable basement membrane-binding protein of *Streptococcus pyogenes*.  
 AUTHOR: Bergey E J; Stinson M W  
 CORPORATE SOURCE: Department of Microbiology, School of Medicine and Biomedical Sciences, State University of New York, Buffalo 14214.  
 CONTRACT NUMBER: RO1-DE05696 (NIDCR)  
 SOURCE: Infection and immunity, (1988 Jul) 56 (7) 1715-21. Journal code: 0246127. ISSN: 0019-9567.  
 PUB. COUNTRY: United States  
 DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)  
 LANGUAGE: English  
 FILE SEGMENT: Priority Journals  
 ENTRY MONTH: 198808  
 ENTRY DATE: Entered STN: 19900308  
 Last Updated on STN: 19900308  
 Entered Medline: 19880801

AB Solubilized surface proteins of *Streptococcus pyogenes* serotype M6 were found by indirect immunofluorescence assays to bind selectively to proteoglycan-containing regions of basement membranes of kidney and cardiac muscle in vitro. Epithelial, endothelial, and interstitial cells were unstained. Binding of streptococcal protein to basement membranes was competitively inhibited by heparin and, to a lesser extent, by heparan sulfate. Weak inhibition was also observed with other glycosaminoglycans, including dermatan sulfate, chondroitin sulfate, and **hyaluronic acid**. Type IV collagen, gelatin, serum fibronectin, **glucuronic acid**, and a selection of monosaccharides had no significant effects on binding. The heparin-inhibitable basement membrane-binding protein was purified by affinity chromatography on heparin-Sepharose 6-B. Polyacrylamide gel electrophoresis in the presence of sodium dodecyl sulfate and urea dissociated the affinity-purified protein into two polypeptides of 9,000 and 15,000 mrs. Chemical analyses revealed that the purified protein was devoid of cysteine, amino and neutral sugars, and phosphate. Thus, the polypeptides are not glycosylated or complexed with trace amounts of lipoteichoic acid or polysaccharide. Binding of purified protein to tissue was determined by direct radioassay and indirect immunofluorescence and was inhibitable by heparin. Although the in vivo effects of this streptococcal component remain to be determined, its deposition on basement membranes in vitro supports the hypothesis that it contributes to the pathogenesis of poststreptococcal

09/853367

glomerulonephritis or acute rheumatic fever.

L10 ANSWER 32 OF 33 MEDLINE on STN  
ACCESSION NUMBER: 86323228 MEDLINE  
DOCUMENT NUMBER: PubMed ID: 2428366  
TITLE: Studies on the affinity of **hyaluronic acid**  
binding protein to glycosaminoglycans.  
AUTHOR: D'Souza M; Datta K  
SOURCE: Biochemistry international, (1986 Jul) 13 (1) 89-100.  
Journal code: 8100311. ISSN: 0158-5231.  
PUB. COUNTRY: Australia  
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)  
LANGUAGE: English  
FILE SEGMENT: Priority Journals  
ENTRY MONTH: 198610  
ENTRY DATE: Entered STN: 19900321  
Last Updated on STN: 19900321  
Entered Medline: 19861015

AB The affinity of **hyaluronic acid** binding protein (HBP) to different glycosaminoglycans (GAGs) was examined. The purified protein was pretreated with **hyaluronic acid** (HA), heparin, **glucuronic acid** and N-Acetyl-glucosamine and was loaded onto **Hyaluronate**-Sephadex affinity column. The binding of HBP to HA immobilized on sephadex column was specifically blocked only by pretreatment of HBP to HA and the elution of HBP was decreased proportionately with the addition of higher quantity of HBP. The specificity of HBP to HA was confirmed as it did not bind to Heparin-Sephadex or Chondroitin-4-Sulphate-Sephadex columns. The complex of HBP in association with HA was further shown on Sephadex G-200 and 7.5% polyacrylamide gel. All the experimental findings indicate that HBP binds specifically to HA only.

L10 ANSWER 33 OF 33 WPIDS COPYRIGHT 2004 THOMSON DERWENT on STN  
ACCESSION NUMBER: 1985-291124 [47] WPIDS  
CROSS REFERENCE: 1986-009297 [02]  
DOC. NO. CPI: C1985-126069  
TITLE: New crosslinked **hyaluronic acid** prods. -  
for medical and cosmetic use, prepared by reaction  
with polyfunctional epoxy cpd..  
DERWENT CLASS: A96 B04 D16 D22  
INVENTOR(S): OKUYAMA, T; SAKURAI, K; UENO, Y  
PATENT ASSIGNEE(S): (SEKG) SEIKAGAKU KOGYO CO LTD  
COUNTRY COUNT: 6  
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
EP 161887	A	19851121	(198547)*	EN	41
R: FR GB SE					
JP 60233101	A	19851119	(198601)		
JP 61164558	A	19860725	(198636)		
JP 61168362	A	19860730	(198637)		
JP 61172808	A	19860804	(198638)		
JP 61210034	A	19860918	(198644)		
S 4716224	A	19871229	(198802)		
S 4863907	A	19890905	(198945)		

Searcher : Shears 571-272-2528

09/853367

DE 3578961	G	19900906 (199037)	
EP 161887	B	19910904 (199136)	
R: DE FR GB SE			
DE 3583963	G	19911010 (199142)	
JP 05074571	B	19931018 (199345)	7
JP 06011694	B2	19940216 (199410)	6
JP 06034814	B2	19940511 (199417)	4
JP 2501551	B2	19960529 (199626)	6

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
EP 161887	A	EP 1985-303183	19850503
JP 60233101	A	JP 1984-88440	19840504
JP 61164558	A	JP 1985-8512	19850122
JP 61168362	A	JP 1985-4908	19850117
JP 61172808	A	JP 1985-13595	19850129
JP 61210034	A	JP 1985-50357	19850315
US 4716224	A	US 1985-729558	19850502
US 4863907	A	US 1985-748729	19850625
JP 05074571	B	JP 1985-50357	19850315
JP 06011694	B2	JP 1985-13595	19850129
JP 06034814	B2	JP 1985-8512	19850122
JP 2501551	B2	JP 1984-88440	19840504

FILING DETAILS:

PATENT NO	KIND	PATENT NO
JP 05074571	B Based on	JP 61210034
JP 06011694	B2 Based on	JP 61172808
JP 06034814	B2 Based on	JP 61168362
JP 2501551	B2 Previous Publ.	JP 60233101

PRIORITY APPLN. INFO: JP 1985-50357 19850315; JP  
 1984-88440 19840504; JP  
 1985-4908 19850117; JP  
 1985-8512 19850122; JP  
 1985-13595 19850129

AN 1985-291124 [47] WPIDS

CR 1986-009297 [02]

AB EP 161887 A UPAB: 19970909

New crosslinked **hyaluronic** acids or their salts are prepared by crosslinking **hyaluronic** acid (HA), or a HA salt, with a polyfunctional epoxy cpd. (I) to give a prod. with a crosslinking index of at least 5 (pref. at least 10) per 1000 repeating **glucuronic** acid and N-acetylglucosamine units.

Pref. (I) may be an epihalohydrin or a bisepoxy cpd., e.g. an alpha, omega-(2,3-epoxypropoxy)alkane or a bisphenol diglycidyl ether.

USE - The prods. are useful for treating arthritis or ophthalmic disorders (e.g. detached retina), as components of skin cosmetics, or for production of medical moulded prods. (e.g. implants). They have better resistance to degradation by hyaluronidase than non-crosslinked HA.

Searcher : Shears 571-272-2528

Dwg.0/10

ABEQ EP 161887 B UPAB: 19930925

A crosslinked **hyaluronic** acid or a salt thereof obtainable by crosslinking **hyaluronic** acid or a salt thereof with a polyfunctional epoxy cpd selected from halomethyloxirane cpds, cpds represented by the following formula (I) wherein n is from 2 to 6, and a diglycidyl ether of bisphenol A or bisphenol F, said crosslinked **hyaluronic** acid or salt exhibiting water solubility and having a crosslinking index of 5 or more per 1000 repeating disaccharide units composed of **glucuronic** acid and N-acetylglucosamine.

ABEQ US 4716224 A UPAB: 19930925

Novel crosslinked **hyaluronic** acid (or its pharmaceutical salt) is produced by crosslinking acid (or salt) with a polyfunctional epoxy cpd. which has crosslinking index of 5-20 per 1000 repeating disaccharide units comprising **glucuronic** acid and N-acetylglucosamine in **hyaluronic** acid. Polyfunctional epoxy cpd. comprises (a) a halomethyloxirane cpd.; and (b) 1,2-bis(2,3-epoxypropoxy)ethane, 1,4-bis(2,3-epoxypropoxy)butane, 1,6-bis(2,3-epoxypropoxy)hexane, or a diglycidyl ether of bisphenol A or bisphenol F.

USE/ADVANTAGE - Is water-soluble and stringy, in a pharmaceutical compsn. for treating arthritis, an ophthalmological compsn. for applying to the eye, for substituting vitreous humour into the eye, or for applying to the skin in a cosmetic compsn. or as a moulded medical film.

ABEQ US 4863907 A UPAB: 19930925

New high M.W. cross-linked glucosaminoglycan (GAG) or salt is obtd. by crosslinking a glucosaminoglycan (excluding **hyaluronic** acid) with polyfunctional epoxy cpd. to give cross-linking index of 0.005-1(0.165)/mole repeating dissaccharides. GAG may be chondroitin sulphate, heparan sulphate, heparin, keratin, or keratan sulphate, keratan polysulphate. Epoxy cpd. is epichlorohydrin or epibromohydrin.

New compsn. to apply to vitreous body or wound comprises 2% soln. in physiological saline with ophthalmic **carrier**, with viscosity below 50000(5000-30000)cp.

USE/ADVANTAGE - To function as natural GAG in development, growth, ageing of tissues and to maintain transparency of eye tissues and control water/electrolytes in body fluids without rejection or adverse reaction. Also used for cosmetics and prosthetics (as mouldable complex with collagen), or for use as sustained release drug. Resists enzymes.

ABEQ JP 93074571 B UPAB: 19931220

Arthropathy medicine comprises a crosslinked **hyaluronic**-acid (I).

USE/ADVANTAGE - The medicine is safe and has high stability against tissue enzyme e.g. hyaluronidase. (J61210034-A)

FILE 'HCAPLUS' ENTERED AT 11:43:14 ON 11 MAY 2004

L11 55 S HA(S)HYALURONIC AND (L2 OR GLUCURONIC)  
L12 1 S L11 AND (TOXIN OR TOXOID OR CARRIER)  
L13 0 S L12 NOT L8

FILE 'MEDLINE, BIOSIS, EMBASE, WPIDS, JICST-EPLUS, JAPIO, PASCAL, DISSABS, FEDRIP' ENTERED AT 11:43:47 ON 11 MAY 2004

09/853367

L14 17 S L12  
L15 0 S L14 NOT L9

(FILE 'MEDLINE' ENTERED AT 11:51:48 ON 11 MAY 2004)

L16 7745 SEA FILE=MEDLINE ABB=ON PLU=ON "HYALURONIC ACID"/CT  
L17 1592 SEA FILE=MEDLINE ABB=ON PLU=ON "GLUCURONIC ACID"/CN  
L18 35 SEA FILE=MEDLINE ABB=ON PLU=ON L16 AND L17  
L19 6287 SEA FILE=MEDLINE ABB=ON PLU=ON TOXINS/CT  
L20 703 SEA FILE=MEDLINE ABB=ON PLU=ON TOXOIDS/CT  
L21 67371 SEA FILE=MEDLINE ABB=ON PLU=ON "CARRIER PROTEINS"/CT  
L22 0 SEA FILE=MEDLINE ABB=ON PLU=ON L18 AND (L19 OR L20 OR  
L21)

L16 7745 SEA FILE=MEDLINE ABB=ON PLU=ON "HYALURONIC ACID"/CT  
L17 1592 SEA FILE=MEDLINE ABB=ON PLU=ON "GLUCURONIC ACID"/CN  
L18 35 SEA FILE=MEDLINE ABB=ON PLU=ON L16 AND L17  
L23 76506 SEA FILE=MEDLINE ABB=ON PLU=ON PEPTIDES/CT  
L24 124489 SEA FILE=MEDLINE ABB=ON PLU=ON PROTEINS/CT  
L25 0 SEA FILE=MEDLINE ABB=ON PLU=ON L18 AND (L23 OR L24)

L16 7745 SEA FILE=MEDLINE ABB=ON PLU=ON "HYALURONIC ACID"/CT  
L17 1592 SEA FILE=MEDLINE ABB=ON PLU=ON "GLUCURONIC ACID"/CN  
L18 35 SEA FILE=MEDLINE ABB=ON PLU=ON L16 AND L17  
L26 125663 SEA FILE=MEDLINE ABB=ON PLU=ON "MOLECULAR WEIGHT"/CT  
L27 2 SEA FILE=MEDLINE ABB=ON PLU=ON L18 AND L26

L16 7745 SEA FILE=MEDLINE ABB=ON PLU=ON "HYALURONIC ACID"/CT  
L17 1592 SEA FILE=MEDLINE ABB=ON PLU=ON "GLUCURONIC ACID"/CN  
L18 35 SEA FILE=MEDLINE ABB=ON PLU=ON L16 AND L17  
L28 47390 SEA FILE=MEDLINE ABB=ON PLU=ON EPITOPES/CT  
L29 1 SEA FILE=MEDLINE ABB=ON PLU=ON L18 AND L28

L30 3 L27 OR L29

L30 ANSWER 1 OF 3 MEDLINE on STN  
ACCESSION NUMBER: 2003175160 MEDLINE  
DOCUMENT NUMBER: PubMed ID: 12693717  
TITLE: Effect of gluco-monosaccharides and different  
conditions on digestion of hyaluronan by testicular  
hyaluronidase.  
AUTHOR: Bystricky P; Machova E; Kolarova N  
CORPORATE SOURCE: Institute of Chemistry, Slovak Academy of Sciences,  
Bratislava, Slovakia.. chempbys@savba.sk  
SOURCE: General physiology and biophysics, (2002 Dec) 21 (4)  
463-9.  
Journal code: 8400604. ISSN: 0231-5882.  
PUB. COUNTRY: Slovakia  
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)  
LANGUAGE: English  
FILE SEGMENT: Priority Journals  
ENTRY MONTH: 200310

Searcher : Shears 571-272-2528



09/853367

ENTRY DATE:           Entered STN: 20030417  
                      Last Updated on STN: 20031017  
                      Entered Medline: 20031016

ED   Entered STN: 20030417  
      Last Updated on STN: 20031017  
      Entered Medline: 20031016

AB   The changes of molecular size of hyaluronan during enzymatic reaction of bovine testicular hyaluronidase at different conditions are monitored by size exclusion high performance liquid chromatography. The effect of glucuronate, galacturonate, glucosamines and pyridoxin as potential inhibitors of hydrolysis is evaluated. The most effective of all tested inhibitors was the presence of glucuronate which not only inhibited the hydrolysis, but also initiated enzymatic reconstruction by transglycosylation reaction at pH 7.0 and absence of any buffer or salt. That effect was not found in the presence of a salt or with any other of the compounds tested.

L30   ANSWER 2 OF 3           MEDLINE on STN  
ACCESSION NUMBER:   90243636       MEDLINE  
DOCUMENT NUMBER:    PubMed ID: 2335504  
TITLE:               Chemical change involved in the oxidative reductive depolymerization of hyaluronic acid.  
AUTHOR:             Uchiyama H; Dobashi Y; Ohkouchi K; Nagasawa K  
CORPORATE SOURCE:   School of Pharmaceutical Sciences, Kitasato University, Tokyo, Japan.  
SOURCE:             Journal of biological chemistry, (1990 May 15) 265 (14) 7753-9.  
                      Journal code: 2985121R. ISSN: 0021-9258.  
PUB. COUNTRY:       United States  
DOCUMENT TYPE:       Journal; Article; (JOURNAL ARTICLE)  
LANGUAGE:           English  
FILE SEGMENT:       Priority Journals  
ENTRY MONTH:         199006  
ENTRY DATE:          Entered STN: 19900706  
                      Last Updated on STN: 20000303  
                      Entered Medline: 19900613

ED   Entered STN: 19900706  
      Last Updated on STN: 20000303  
      Entered Medline: 19900613

AB   The oxidative reductive depolymerization (ORD) of hyaluronate has been investigated. A solution of hyaluronate ( $M_r 4.07 \times 10^5$ ) in phosphate buffer (pH 7.2) was incubated in the presence of  $Fe^{2+}$  for 24 h at 37 degrees C under an oxygen atmosphere to yield depolymerized hyaluronate (ORD fragments; an average  $M_r$  of 2,600). The ORD fragments contain 21 and 24% less hexosamine and uronic acid, respectively, but no olefinic linkage. They were exhaustively digested with chondroitinase AC-II. The resulting oligosaccharides and monosaccharides were separated by gel filtration and ion-exchange chromatography, and their structures were determined by proton and carbon-13 NMR, fast atom bombardment mass spectrometry, and chromatographic techniques combined with chemical modifications. The following structures derived from the reducing ends of the ORD fragments were identified: 4,5-unsaturated GlcA(beta 1----3)-N-acetyl-D-glucosaminic acid (where GlcA- represents glucuronosyl-) (21%), 4,5-unsaturated GlcA(beta 1----3)GlcNAc(beta

1----3)-D-arabo-pentaauronic acid (24%), and N-acetyl-D-glucosamine (51%). The following structures derived from the nonreducing ends were identified: L-threo-tetro-dialdosyl-(1----3)GlcNAc (a tentative structure, 8%), N-acetylhyalobiuronic acid (20%), and N-acetyl-D-glucosamine (45%). The results indicate that the ORD reaction of hyaluronate proceeds essentially by random destruction of unit monosaccharides due to oxygen-derived free radicals, followed by secondary hydrolytic cleavage of the resulting unstable glycosidic substituents.

L30 ANSWER 3 OF 3 MEDLINE on STN  
 ACCESSION NUMBER: 86306527 MEDLINE  
 DOCUMENT NUMBER: PubMed ID: 2427634  
 TITLE: Induction of antibodies to hyaluronic acid by immunization of rabbits with encapsulated streptococci.  
 AUTHOR: Fillit H M; McCarty M; Blake M  
 SOURCE: Journal of experimental medicine, (1986 Sep 1) 164 (3) 762-76.  
 Journal code: 2985109R. ISSN: 0022-1007.  
 PUB. COUNTRY: United States  
 DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)  
 LANGUAGE: English  
 FILE SEGMENT: Priority Journals  
 ENTRY MONTH: 198610  
 ENTRY DATE: Entered STN: 19900321  
 Last Updated on STN: 20000303  
 Entered Medline: 19861006  
 ED Entered STN: 19900321  
 Last Updated on STN: 20000303  
 Entered Medline: 19861006  
 AB The immunogenicity of hyaluronic acid was investigated. Rabbits were immunized with encapsulated group A and C streptococci. Intact long-chain hyaluronate was conjugated to BSA for use as antigen in an ELISA. Antibodies to the hyaluronate-BSA conjugate were detected in peak immune sera. The specificity of the antibodies for both mammalian and streptococcal hyaluronate was shown by inhibition studies. To further confirm the presence of antihyaluronate antibodies, hyaluronidase-digested streptococcal hyaluronate was conjugated to biotin and used as an antigen in the ELISA. A clear immunization effect was shown for each rabbit by the study of preimmune and postimmunization bleedings. Titers for each rabbit increased by greater than 32 - 256 - fold. Inhibition studies using hyaluronidase-digested hyaluronate and periodate-treated hyaluronate showed that the immunodominant site of antibody reactivity was a terminal glucuronic acid residue. Further studies showed that the carboxyl group of the terminal glucuronide was the major immunoreactive site. Both mammalian and streptococcal hyaluronate inhibited the immune rabbit sera reaction to streptococcal hyaluronate, demonstrating crossreactivity of these molecules. Thus, hyaluronate was shown to be immunogenic in rabbits.

(FILE 'TOXCENTER, PHIC, PHIN' ENTERED AT 11:56:36 ON 11 MAY 2004)

L31 1 S L8  
 L32 0 S L12

09/853367

L31 ANSWER 1 OF 1 TOXCENTER COPYRIGHT 2004 ACS on STN  
ACCESSION NUMBER: 2003:276918 TOXCENTER  
COPYRIGHT: Copyright 2004 ACS  
DOCUMENT NUMBER: CA13925386334R  
TITLE: Production of monomeric calicheamicin derivative  
cytotoxic drug/**carrier** conjugates  
AUTHOR(S): Kunz, Arthur; Moran, Justin Keith; Rubino, Joseph  
Thomas; Jain, Neera; Vidunas, Eugene Joseph;  
Simpson, John McLean; Robbins, Paul David; Merchant,  
Nishith; DiJoseph, John Francis; et al.  
CORPORATE SOURCE: ASSIGNEE: Wyeth Holdings Corporation  
PATENT INFORMATION: WO 2003092623 A2 13 Nov 2003  
SOURCE: (2003) PCT Int. Appl., 186 pp.  
CODEN: PIXXD2.  
COUNTRY: UNITED STATES  
DOCUMENT TYPE: Patent  
FILE SEGMENT: CAPLUS  
OTHER SOURCE: CAPLUS 2003:892567  
LANGUAGE: English  
ENTRY DATE: Entered STN: 20031117  
Last Updated on STN: 20040413

AB The present invention relates to methods for. the production of  
monomeric cytotoxic drug/**carrier** conjugates (the  
"conjugates") with higher drug loading and substantially reduced low  
conjugate fraction (LCF). Cytotoxic drug derivative/antibody  
conjugates, compns. comprising the conjugates and uses of the  
conjugates are also described. Particularly, the invention relates  
to anti-CD22 antibody-monomeric calicheamicin conjugates. The  
invention also relates to the conjugates of the invention, to  
methods of purification of the conjugates, to pharmaceutical compns.  
comprising the conjugates, and to uses of the conjugates.

(FILE 'HCAPLUS, MEDLINE, BIOSIS, EMBASE, WPIDS, JICST-EPLUS, JAPIO,  
PASCAL, DISSABS, FEDRIP, PHIC, PHIN, TOXCENTER' ENTERED AT 11:58:05  
ON 11 MAY 2004)

L33 412 SEA ABB=ON PLU=ON "MICHON F"?/AU  
L34 8869 SEA ABB=ON PLU=ON "MOORE S"?/AU  
L35 1673 SEA ABB=ON PLU=ON ("LAUDE SHARP M"? OR "SHARP LAUDE  
M"? OR "SHARP M"? OR "LAUDE M"?)/AU  
L36 1836 SEA ABB=ON PLU=ON "BLAKE M"?/AU  
L37 9 SEA ABB=ON PLU=ON L33 AND L34 AND L35  
L38 27 SEA ABB=ON PLU=ON L33 AND (L34 OR L35)  
L39 9 SEA ABB=ON PLU=ON L34 AND L35  
L40 2 SEA ABB=ON PLU=ON (L33 OR L34 OR L35) AND L4  
L41 27 SEA ABB=ON PLU=ON L37 OR L38 OR L39 OR L40  
L42 14 DUP REM L41 (13 DUPLICATES REMOVED)

-Author(s)

L42 ANSWER 1 OF 14 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on  
STN DUPLICATE 1  
ACCESSION NUMBER: 2004:41064 BIOSIS  
DOCUMENT NUMBER: PREV200400041633  
TITLE: Tetanus toxin C-fragment as a universal carrier  
protein for conjugate vaccines.  
AUTHOR(S): Kim, J. [Reprint Author]; Sarkar, A. [Reprint  
Author]; Kristiansen, M. [Reprint Author];  
**Laude-Sharp, M.** [Reprint Author]; Farley, E.

Searcher : Shears 571-272-2528

[Reprint Author]; Uitz, C. [Reprint Author];  
**Moore, S.** [Reprint Author]; Ren, K. [Reprint  
 Author]; **Michon, F.** [Reprint Author]  
 CORPORATE SOURCE: Baxter BioScience - Vaccines, Columbia, MD, USA  
 SOURCE: Abstracts of the Interscience Conference on  
 Antimicrobial Agents and Chemotherapy, (2003) Vol.  
 43, pp. 294. print.  
 Meeting Info.: 43rd Annual Interscience Conference on  
 Antimicrobial Agents and Chemotherapy. Chicago, IL,  
 USA. September 14-17, 2003. American Society for  
 Microbiology.  
 DOCUMENT TYPE: Conference; (Meeting)  
 Conference; Abstract; (Meeting Abstract)  
 LANGUAGE: English  
 ENTRY DATE: Entered STN: 14 Jan 2004  
 Last Updated on STN: 14 Jan 2004

AB Background: Tetanus toxin C-fragment (TTc) is a non-toxic 52 kD polypeptide generated by papain cleavage of tetanus toxin, and corresponds to the 451 amino acids at the C-terminus. The C-fragment contains at least one of the universal immunogenic T cell epitopes recognized by all primed donors irrespective of their MHC haplotypes and has been proven to induce protective tetanus toxin antibodies. We compared the efficacies of Meningococcal and Group B Streptococcal conjugate vaccines in mice using TTc (native and recombinant) versus tetanus toxoid (TT) as the carrier protein. Methods: For meningococcal C, Y and W-135 conjugates, 4-6 week old Swiss Webster female mice (20 per group) were immunized s.c. at days 0, 28 and 42 with 2µg of polysaccharide conjugated to either TTc or TT. Antibody-complement mediated killing of bacteria was determined by a serum bactericidal assay (SBA) using rabbit complement. Group B streptococcal (GBS) Ia, III, and V conjugated to TTc or TT were evaluated using a neonatal challenge model. CD1 female mice (10 per challenge group) were inoculated with 1µg of each of the conjugated type-polysaccharides at days 0 and 21. Mice were impregnated at day 21 and the neonates were challenged 48 hours following birth. Polysaccharide-specific IgG were measured by ELISA for each conjugate tested. Conjugates were assessed for levels of protective tetanus toxin antibodies. Results: The TTc conjugates in mice generated equivalent ELISA and SBA titers when compared to their TT counterparts. The level of protecting tetanus toxin antibodies was found to be at least 500 fold lower for the TTc conjugates compared to their corresponding TT conjugates. Conclusions: Meningococcal and GBS TTc conjugates demonstrated equivalent levels of immunogenicity and functional activity in mice as their TT counterparts. Moreover, the C-fragment conjugates did not significantly induce production of tetanus toxin antibodies.

L42 ANSWER 2 OF 14 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on  
 STN

ACCESSION NUMBER: 2004:41063 BIOSIS  
 DOCUMENT NUMBER: PREV200400041632  
 TITLE: Preclinical studies on the development of an optimal  
 meningococcal CYW conjugate vaccine.  
 AUTHOR(S): Farley, E. K. [Reprint Author]; Saunders, J. [Reprint  
 Author]; Hebblewaite, D. [Reprint Author]; Nauman, K.  
 [Reprint Author]; Uitz, C. [Reprint Author];

**Moore, S.** [Reprint Author]; Huang, C.-H. [Reprint Author]; Kim, J. [Reprint Author]; Ren, K. [Reprint Author]; Fusco, P. [Reprint Author]; **Michon, F.** [Reprint Author]

CORPORATE SOURCE: Baxter BioScience-Vaccines, Columbia, MD, USA

SOURCE: Abstracts of the Interscience Conference on Antimicrobial Agents and Chemotherapy, (2003) Vol. 43, pp. 293. print.  
Meeting Info.: 43rd Annual Interscience Conference on Antimicrobial Agents and Chemotherapy. Chicago, IL, USA. September 14-17, 2003. American Society for Microbiology.

DOCUMENT TYPE: Conference; (Meeting)  
Conference; Abstract; (Meeting Abstract)

LANGUAGE: English

ENTRY DATE: Entered STN: 14 Jan 2004  
Last Updated on STN: 14 Jan 2004

AB Background: *Neisseria meningitidis* remains one of the most feared pediatric infections as a result of its rapid progression, high fatality rates and frequency of sequelae. The introduction of monovalent meningococcal Serogroup C, GCM, conjugate vaccines have already dramatically reduced the burden of meningococcal C disease in countries where these vaccines are being used. In the United States it has been observed that the incidence of Serogroup Y bacterial meningitis is increasing and outbreak events of *N. meningitidis* Serogroup W occurring in sub-Saharan Africa have continued to rise. In continuation of our monovalent meningococcal Serogroup C vaccine program, we have developed a more comprehensive meningococcal conjugate combination to include serogroups Y and W-135. Methods: Optimization of the MenCYW formulation was centered on the choice of the carrier protein for each serogroup polysaccharide. (PS), the O-acetylation status and the size of the polysaccharides prior to their coupling to the carrier protein. All combinations of MenCYW were tested in animals to assess the possibility of interference and dose response and adjuvant study data were also examined. Results: All 3 PS exhibited enhanced immune potency when conjugated to tetanus toxoid (TT) compared to other carriers, >30%, >70% and >50% enhancements for GCMP-, GYMP- and GWMP-TT conjugates respectively. The acetylation status of the 3 PS, which has been discussed elsewhere, is fully de-O-acetylated for optimal antibody potency. The trivalent formulation was ascertained to be the optimal compromise between these and other data to be discussed. Conclusions: Preclinical testing has established the preferred formulation as GCMP-TT/GYMP-TT/GWMP-rPorB with all three polysaccharides being completely de-O-acetylated.

L42 ANSWER 3 OF 14 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN

ACCESSION NUMBER: 2004:41057 BIOSIS

DOCUMENT NUMBER: PREV200400041626

TITLE: Effect of O-acetylation of *Neisseria meningitidis* serogroup Y capsular polysaccharide on development of functional antibodies.

AUTHOR(S): Farley, E. K. [Reprint Author]; Uitz, C. [Reprint Author]; **Moore, S.** [Reprint Author]; Dong, W. [Reprint Author]; **Michon, F.** [Reprint

Author]  
 CORPORATE SOURCE: Baxter BioScience-Vaccines, Columbia, MD, USA  
 SOURCE: Abstracts of the Interscience Conference on  
 Antimicrobial Agents and Chemotherapy, (2003) Vol.  
 43, pp. 292. print.  
 Meeting Info.: 43rd Annual Interscience Conference on  
 Antimicrobial Agents and Chemotherapy. Chicago, IL,  
 USA. September 14-17, 2003. American Society for  
 Microbiology.  
 DOCUMENT TYPE: Conference; (Meeting)  
 Conference; Abstract; (Meeting Abstract)  
 LANGUAGE: English  
 ENTRY DATE: Entered STN: 14 Jan 2004  
 Last Updated on STN: 14 Jan 2004

AB Background: Recent evaluation of the O-acetylation status of *N.* meningitidis capsular polysaccharides (PS) has shown the majority of group Y PS tested to be highly O-acetylated, similar to serogroups A and C, whereas group W135 PS appear to be less or not O-acetylated (OA). The role of these OA groups as immunological epitopes, or masks for these epitopes, is of concern for glycoconjugate vaccines. Methods: Evaluation of O-acetylation on GYMP was carried out by H-NMR spectroscopy. Tetanus toxoid (TT) conjugates of dOA and OA GYMP were prepared by reductive amination. GYMP-specific antibodies were measured by ELISA and competitive ELISA, using OA and dOA GYMP-HSA conjugates. Functional antibodies were measured by the complement mediated bactericidal assay. Competitive inhibition of serum bactericidal activity (SBA) using GYMP inhibitors with various levels and location of OA groups was used to delineate the functional epitope. Results: H-NMR examination of PS from several GYM clinical isolates indicated that the OA groups were located at either carbon 9 or 7 of their sialic acid residues in various relative proportions. Both OA and dOA GYMP conjugates generated similar levels of GYMP-specific IgG and SBA. The antibodies induced with the dOA GYMP conjugates were able to kill both OA and dOA GYM strains. Further, inhibition of SBA with PS showed dOA GYMP to be significantly more effective than its OA counterpart at inhibiting the SBA of OA bacteria. Conclusions: Collectively the above data indicates 1) the OA group on the GYMP is not critical for immunogenicity of the conjugate vaccine 2) a strong correlation between dOA PS-specific IgG and SBA 3) O-acetylation of the PS is not a requirement for the development of protective antibodies and 4) the heterogeneity in OA group distribution of the GYMP both in its location and concentration complicates formulation of a polysaccharide conjugate, making the dOA form of the GYMP a better candidate than the OA for vaccine development.

L42 ANSWER 4 OF 14 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on  
 STN

ACCESSION NUMBER: 2004:40980 BIOSIS  
 DOCUMENT NUMBER: PREV200400041559  
 TITLE: Determinant specificities of the groups Y and W135  
 polysaccharides of *Neisseria meningitidis*: Evidence  
 for conformational epitopes.  
 AUTHOR(S): Moore, S. L. [Reprint Author]; Uitz, C.  
 [Reprint Author]; Michon, F. [Reprint  
 Author]

CORPORATE SOURCE: Baxter BioScience-Vaccines, Columbia, MD, USA  
 SOURCE: Abstracts of the Interscience Conference on  
 Antimicrobial Agents and Chemotherapy, (2003) Vol.  
 43, pp. 275. print.  
 Meeting Info.: 43rd Annual Interscience Conference on  
 Antimicrobial Agents and Chemotherapy. Chicago, IL,  
 USA. September 14-17, 2003. American Society for  
 Microbiology.  
 DOCUMENT TYPE: Conference; (Meeting)  
 Conference; Abstract; (Meeting Abstract)  
 LANGUAGE: English  
 ENTRY DATE: Entered STN: 14 Jan 2004  
 Last Updated on STN: 14 Jan 2004

AB Background: Previous studies had identified the length dependency of polysaccharide (PS) protective epitopes which had been referred to as conformational epitopes (1-3). Because this information is critically relevant to polysaccharide conjugate vaccine development we have investigated whether meningococcal PS W135 and Y possess such epitopes. Methods: Oligosaccharides consisting of one or more repeating disaccharide units were derived from the capsular polysaccharides of groups W135 and Y meningococci (GWMP and GYMP, respectively) by mild acid hydrolysis. The relative affinities of anticapsular antibodies binding to derivative oligosaccharides of different chain lengths were measured in GWMP and GYMP ELISA inhibition assays. Results: For the GWMP, there was a large increase in Ig binding inhibition as the oligosaccharide size increased from two to three repeating disaccharide units. This was also the case with Ig binding to GYMP, although the increase of inhibition was not as dramatic between two and three disaccharide units. In the cases of both polysaccharide species, the concentration of inhibiting antigen required to achieve 50% inhibition of rabbit Ig binding increased progressively as the inhibiting disaccharide chain length increased from one disaccharide subunit through nine repeating disaccharide subunits. In the case of both GWMP and GYMP, higher molecular weight polysaccharides were still more efficient at inhibition of Ig binding than were the lower molecular weight oligosaccharides. Conclusions: These data indicate that antibodies directed against both of these polysaccharides recognize conformational epitopes fully expressed in high molecular weight forms of these antigens.

L42 ANSWER 5 OF 14 HCAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 2  
 ACCESSION NUMBER: 2002:888596 HCAPLUS  
 DOCUMENT NUMBER: 137:368571  
 TITLE: Immunogenic compositions of low molecular weight  
**hyaluronic** acid and methods to prevent,  
 treat and diagnose infections and diseases  
 caused by group A and group C streptococci  
 INVENTOR(S): **Michon, Francis; Moore, Samuel**  
 ; **Laude-Sharp, Maryline**; Blake, Milan  
 PATENT ASSIGNEE(S): Baxter International Inc., USA; Baxter  
 Healthcare S.A.  
 SOURCE: PCT Int. Appl., 49 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002092131	A2	20021121	WO 2002-EP5310	20020510
WO 2002092131	A3	20030320		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
US 2002192205	A1	20021219	US 2001-853367	20010511
EP 1385554	A2	20040204	EP 2002-750926	20020510
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
BR 2002009562	A	20040330	BR 2002-9562	20020510
PRIORITY APPLN. INFO.:				
			US 2001-853367	A 20010511
			WO 2002-EP5310	W 20020510
AB The present invention provides antigenic compns. and methods for treatment and prevention of infection and disease caused by group A and group C streptococci. In particular, the invention provides low mol. weight <b>hyaluronic</b> acid, low mol. weight <b>hyaluronic</b> acid linked to a carrier and compns. comprising them. The compns. elicit antibodies to low mol. weight <b>hyaluronic</b> acid which are cross-reactive with group A and C streptococci and which are minimally cross-reactive with native <b>hyaluronic</b> acid. The invention is particularly useful for providing both active and passive immunogenic protection for those infected with or at risk infection with group A and group C streptococci. Addnl., the present invention provides methods and compns. useful for diagnosing infections and diseases caused by group A and group C streptococci.				
L42 ANSWER 6 OF 14 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN				
ACCESSION NUMBER: 2002:223198 BIOSIS				
DOCUMENT NUMBER: PREV200200223198				
TITLE: Stability of Group C meningococcal polysaccharide-tetanus toxoid conjugate vaccine (NeisVac-C): Correlation of immunochemical and serological analyses of vaccines heated to 100degreeC.				
AUTHOR(S): <b>Moore, S. L.</b> [Reprint author]; Ren, K. [Reprint author]; Huang, C. H. [Reprint author]; Fusco, P. C. [Reprint author]; <b>Michon, F.</b> [Reprint author]				
CORPORATE SOURCE: Baxter Healthcare Corporation, Columbia, MD, USA				
SOURCE: Abstracts of the General Meeting of the American Society for Microbiology, (2001) Vol. 101, pp. 339. print.				



09/853367

Meeting Info.: 101st General Meeting of the American Society for Microbiology. Orlando, FL, USA. May 20-24, 2001. American Society of Microbiology. ISSN: 1060-2011.

DOCUMENT TYPE: Conference; (Meeting)  
Conference; Abstract; (Meeting Abstract)  
LANGUAGE: English  
ENTRY DATE: Entered STN: 3 Apr 2002  
Last Updated on STN: 3 Apr 2002

AB Coupling T-cell independent antigens such as the capsular polysaccharide (CPS) from Group C *Neisseria meningitidis* to a T-cell dependent carrier protein enhances the immune response to such antigens. The potency of these vaccines is dependent on the maintenance of the structural integrity of the conjugate molecule. Group C meningococcal polysaccharide-tetanus toxoid (NeisVac-C) conjugate vaccine samples were formulated both in the presence and absence of Al(OH)<sub>3</sub> adjuvant. Samples were then heated in a water bath to 100degreeC for up to 4 hours and tested by a competitive enzyme-linked immunosorbent assay (ELISA) for preservation of the antigenicity of both the CPS and protein components of the conjugate. Samples were then further diluted and placed in a mouse potency study to examine 2.0 and 0.1 mug CPS doses. Competitive ELISA results indicated that in the presence of Al(OH)<sub>3</sub>, there was no significant decrease in the antigenicity of the CPS component of NeisVac-CTM, even after heating to 100degreeC for up to four hours. By contrast, in the absence of Al(OH)<sub>3</sub> there was a 10-fold loss of antigenicity of the CPS after only 1 hour. The antigenicity of the protein component was drastically reduced after just 5 minutes at 100degreeC in both formulations. Potency studies examining ELISA IgG and serum bactericidal activity of antisera produced by immunization with these vaccines showed only minimal decreases in activity after 4 hours at 100degreeC. Antigenicity results from competitive ELISA closely predicted the immunogenicity results of the mouse potency assay for NeisVac-CTM. The CPS component of this vaccine was exceedingly stable under heat stress when adsorbed with Al(OH)<sub>3</sub>, showing only marginal losses in immunogenicity while the protein carrier was antigenically altered with heat.

L42 ANSWER 7 OF 14 HCAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 3

ACCESSION NUMBER: 1998:707259 HCAPLUS  
DOCUMENT NUMBER: 130:108851  
TITLE: Preclinical studies on a recombinant group B meningococcal porin as a carrier for a novel *Haemophilus influenzae* type b conjugate vaccine  
AUTHOR(S): Fusco, Peter C.; Michon, Francis; Laude-Sharp, Maryline; Minetti, Conceicao A. S. A.; Huang, Chun-Hsien; Heron, Iver; Blake, M. S.  
CORPORATE SOURCE: North American Vaccine, Inc., Beltsville, MD, 20705, USA  
SOURCE: Vaccine (1998), 16(19), 1842-1849  
CODEN: VACCDE; ISSN: 0264-410X  
PUBLISHER: Elsevier Science Ltd.  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
AB In anticipation of future combination vaccines, a recombinant class

Searcher : Shears 571-272-2528

3 porin (rPorB) of group B meningococci was evaluated as an alternative carrier protein for a Haemophilus influenzae type b (Hib) polyribosylribitol phosphate (PRP) conjugate vaccine. The use of rPorB may avoid undesirable immunol. interactions among vaccine components, including epitopic suppression from conventional carriers (e.g. tetanus toxoid [TT]), as well as provide desirable immunomodulatory effects. Rats were found to be more reliable and consistent than mice or guinea pigs for studying antibody responses to the Hib conjugates. Different Hib conjugates, Hib-TT and Hib-rPorB, consisting of PRP conjugated by reductive amination to TT or rPorB, were compared in rats. Com. available, licensed vaccines, HbOC (HibTITER®) and PRP-T (OmniHib®), were used as reference controls. Maximum geometric mean ELISA IgG titers were obtained in rats after only two doses, showing booster effects for all. However, Hib-rPorB immunization consistently resulted in responses that were 1-2 orders of magnitude greater than those for the other conjugates, including the licensed control vaccines. A maximum 4600-fold rise was observed for Hib-rPorB after two doses, and, unlike the other conjugates, a 100% response rate was always achieved without adjuvant. These results warrant further investigation of Hib-rPorB in combination with DTap.

REFERENCE COUNT: 26 THERE ARE 26 CITED REFERENCES AVAILABLE  
FOR THIS RECORD. ALL CITATIONS AVAILABLE  
IN THE RE FORMAT

L42 ANSWER 8 OF 14 HCAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 4  
ACCESSION NUMBER: 1998:644179 HCAPLUS  
DOCUMENT NUMBER: 130:64887  
TITLE: Multivalent pneumococcal capsular polysaccharide  
conjugate vaccines employing genetically  
detoxified pneumolysin as a carrier protein  
AUTHOR(S): Michon, Francis; Fusco, Peter C.;  
Minetti, Conceicao A. S. A.; Laude-Sharp,  
Maryline; Uitz, Catherine; Huang,  
Chun-Hsien; D'Ambra, Anello J.; Moore,  
Samuel; Remeta, David P.; Heron, Iver;  
Blake, M. S.  
CORPORATE SOURCE: North American Vaccine, Inc., Beltsville, MD,  
21046, USA  
SOURCE: Vaccine (1998), 16(18), 1732-1741  
CODEN: VACCDE; ISSN: 0264-410X  
PUBLISHER: Elsevier Science Ltd.  
DOCUMENT TYPE: Journal  
LANGUAGE: English

AB A genetically detoxified pneumolysin, pneumolysoid (PLD), was investigated as a carrier protein for pneumococcal capsular polysaccharide (CPS). Such a CPS-PLD conjugate might provide addnl. protection against pneumococcal infections and resultant tissue damage. A single point mutant of pneumolysin was selected, which lacked measurable hemolytic activity, but exhibited the overall structural and immunol. properties of the wild type. PLD conjugates were prepared from CPS serotypes 6B, 14, 19F, and 23F by reductive amination. The structural features of free PLD, as well as the corresponding CPS-PLD, as assessed by CD spectroscopy, were virtually indistinguishable from the wild type counterpart. Each of the CPS monovalent and tetravalent conjugate formulations were

examined for immunogenicity in mice at both 0.5 and 2.0 µg CPS per dose. Tetanus toxoid (TT) conjugates were similarly created and used for comparison. The resultant conjugate vaccines elicited high levels of CPS-specific IgG that was opsonophagocytic for all serotypes tested. Opsonophagocytic titers, expressed as reciprocal dilns. resulting in 50% killing using HL-60 cells, ranged from 100 to 30000, depending on the serotype and formulation. In general, the lower dose and tetravalent formulations yielded the best responses for all serotypes (i.e., either equivalent or better than the higher dose and monovalent formulations). The PLD conjugates were also generally equivalent to or better in CPS-specific responses than the TT conjugates. In particular, both the PLD conjugate and the tetravalent formulations induced responses for type 23F CPS that were approx. an order of magnitude greater than that of the corresponding TT conjugate and monovalent formulations. In addition, all the PLD conjugates elicited high levels of pneumolysin-specific IgG which were shown to neutralize pneumolysin-induced hemolytic activity in vitro. As a result of these findings, PLD appears to provide an advantageous alternative to conventional carrier proteins for pneumococcal multivalent CPS conjugate vaccines.

REFERENCE COUNT: 33 THERE ARE 33 CITED REFERENCES AVAILABLE  
FOR THIS RECORD. ALL CITATIONS AVAILABLE  
IN THE RE FORMAT

L42 ANSWER 9 OF 14 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on  
STN

ACCESSION NUMBER: 1999:249154 BIOSIS  
DOCUMENT NUMBER: PREV199900249154  
TITLE: Tetravalent combination conjugate vaccines against  
group B streptococci.  
AUTHOR(S): **Laude-Sharp, M.** [Reprint author]; Fusco, P.  
C. [Reprint author]; Uitz, C. [Reprint author];  
Rathmann, J. B. [Reprint author]; Walker, M. S.  
[Reprint author]; Blake, M. S. [Reprint author];  
**Michon, F.** [Reprint author]  
CORPORATE SOURCE: North American Vaccine, Inc., Beltsville, MD, USA  
SOURCE: Abstracts of the Interscience Conference on  
Antimicrobial Agents and Chemotherapy, (1998) Vol.  
38, pp. 301. print.  
Meeting Info.: 38th Interscience Conference on  
Antimicrobial Agents and Chemotherapy. San Diego,  
California, USA. September 24-27, 1998. American  
Society for Microbiology.  
DOCUMENT TYPE: Conference; (Meeting)  
Conference; Abstract; (Meeting Abstract)  
Conference; (Meeting Poster)  
LANGUAGE: English  
ENTRY DATE: Entered STN: 2 Jul 1999  
Last Updated on STN: 2 Jul 1999

L42 ANSWER 10 OF 14 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on  
STN

ACCESSION NUMBER: 1999:249155 BIOSIS  
DOCUMENT NUMBER: PREV199900249155  
TITLE: Recombinant group B meningococcal porin as a carrier  
protein for a novel Haemophilus influenzae type B

conjugate vaccine.  
 AUTHOR(S): Fusco, P. C. [Reprint author]; **Michon, F.**  
 [Reprint author]; **Laude-Sharp, M.** [Reprint  
 author]; Minetti, C.A.S.A. [Reprint author]; Huang,  
 C. H. [Reprint author]; Heron, I. [Reprint author];  
 Blake, M. S. [Reprint author]  
 CORPORATE SOURCE: North American Vaccine, Inc., Beltsville, MD, USA  
 SOURCE: Abstracts of the Interscience Conference on  
 Antimicrobial Agents and Chemotherapy, (1998) Vol.  
 38, pp. 301. print.  
 Meeting Info.: 38th Interscience Conference on  
 Antimicrobial Agents and Chemotherapy. San Diego,  
 California, USA. September 24-27, 1998. American  
 Society for Microbiology.  
 DOCUMENT TYPE: Conference; (Meeting)  
 Conference; Abstract; (Meeting Abstract)  
 Conference; (Meeting Poster)  
 LANGUAGE: English  
 ENTRY DATE: Entered STN: 2 Jul 1999  
 Last Updated on STN: 2 Jul 1999

L42 ANSWER 11 OF 14 HCAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 5  
 ACCESSION NUMBER: 1998:3712 HCAPLUS  
 DOCUMENT NUMBER: 128:74010  
 TITLE: Combination conjugate vaccines against multiple  
 serotypes of group B streptococci  
 AUTHOR(S): **Michon, F.**; Fusco, P. C.; D'Ambra, A.  
 J.; **Laude-Sharp, M.**; Long-Rowe, K.;  
 Blake, S.; Tai, J. Y.  
 CORPORATE SOURCE: North American Vaccine, Inc., Beltsville, MD,  
 USA  
 SOURCE: Advances in Experimental Medicine and Biology  
 (1997), 418 (Streptococci and the Host), 847-850  
 CODEN: AEMBAP; ISSN: 0065-2598  
 PUBLISHER: Plenum Publishing Corp.  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 AB Immunity to group B streptococci (GBS) is correlated to the presence  
 of antibodies to the capsular polysaccharides (CPS). Conjugation of  
 type III CPS to the beta C protein results in high IgG titer to both  
 components. Here, the authors have examined the immunogenicity of  
 capsular polysaccharides of four GBS serotypes (Ia, Ib, II, III)  
 after conjugation to the beta C protein by reductive amination.  
 REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR  
 THIS RECORD. ALL CITATIONS AVAILABLE IN  
 THE RE FORMAT

L42 ANSWER 12 OF 14 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on  
 STN  
 ACCESSION NUMBER: 1997:282997 BIOSIS  
 DOCUMENT NUMBER: PREV199799582200  
 TITLE: Preclinical studies on combination conjugate vaccines  
 against multiple serotypes of group B streptococci.  
 AUTHOR(S): **Laude-Sharp, M.**; Fusco, P. C.; D'Ambra, A.  
 J.; Long-Rowe, K.; Blake, M. S.; Tai, J. Y.;  
**Michon, F.**

CORPORATE SOURCE: North American Vaccine Inc., Beltsville, MD, USA  
 SOURCE: Abstracts of the General Meeting of the American Society for Microbiology, (1997) Vol. 97, No. 0, pp. 251.  
 Meeting Info.: 97th General Meeting of the American Society for Microbiology. Miami Beach, Florida, USA. May 4-8, 1997.  
 ISSN: 1060-2011.

DOCUMENT TYPE: Conference; (Meeting)  
 Conference; Abstract; (Meeting Abstract)

LANGUAGE: English

ENTRY DATE: Entered STN: 3 Jul 1997

Last Updated on STN: 3 Jul 1997

L42 ANSWER 13 OF 14 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN

ACCESSION NUMBER: 1997:282998 BIOSIS

DOCUMENT NUMBER: PREV199799582201

TITLE: Preclinical studies in mice on combination conjugate vaccines against pneumococcal otitis media.

AUTHOR(S): Fusco, P. C.; D'Ambra, A. J.; Huang, C.-H.; Uitz, C.;

Moore, S.; Perry, J. W.; Tai, J. Y.;

Michon, F.

CORPORATE SOURCE: North American Vaccine Inc., Beltsville, MD, USA  
 SOURCE: Abstracts of the General Meeting of the American Society for Microbiology, (1997) Vol. 97, No. 0, pp. 251.

Meeting Info.: 97th General Meeting of the American Society for Microbiology. Miami Beach, Florida, USA. May 4-8, 1997.  
 ISSN: 1060-2011.

DOCUMENT TYPE: Conference; (Meeting)  
 Conference; Abstract; (Meeting Abstract)

LANGUAGE: English

ENTRY DATE: Entered STN: 3 Jul 1997

Last Updated on STN: 3 Jul 1997

L42 ANSWER 14 OF 14 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN

ACCESSION NUMBER: 1998:113392 BIOSIS

DOCUMENT NUMBER: PREV199800113392

TITLE: Specificity of the immune response to the modified meningococcal B polysaccharide/rPorB conjugate vaccine.

AUTHOR(S): Moore, S. [Reprint author]; Farley, E. K.; Hebbelwaite, D. L.; Badger, C. V.; Fusco, P. C.; Heron, I.; Michon, F.

CORPORATE SOURCE: North American Res. Inc., Res. Dep., 12103 Indiam Creek Ct., Beltsville, MD 20705, USA

SOURCE: Abstracts of the Interscience Conference on Antimicrobial Agents and Chemotherapy, (1997) Vol. 37, pp. 192. print.

Meeting Info.: 37th Interscience Conference on Antimicrobial Agents and Chemotherapy. Toronto, Ontario, Canada. September 28-October 1, 1997. ICAAC.

DOCUMENT TYPE: Conference; (Meeting)

09/853367

Conference; Abstract; (Meeting Abstract)  
Conference; (Meeting Slide)  
LANGUAGE: English  
ENTRY DATE: Entered STN: 3 Mar 1998  
Last Updated on STN: 3 Mar 1998

FILE 'HOME' ENTERED AT 12:00:04 ON 11 MAY 2004

09/853367

FILE 'REGISTRY' ENTERED AT 11:30:51 ON 11 MAY 2004

L1 E HYALURONIC ACID/CN 5  
1 S E3  
E GLUCURONIC ACID/CN 5  
L2 2 S E3

-key terms

FILE 'HCAPLUS' ENTERED AT 11:32:12 ON 11 MAY 2004

L1 1 SEA FILE=REGISTRY ABB=ON PLU=ON "HYALURONIC ACID"/CN  
L2 2 SEA FILE=REGISTRY ABB=ON PLU=ON "GLUCURONIC ACID"/CN  
L3 16254 SEA FILE=HCAPLUS ABB=ON PLU=ON L1 OR HYALURONIC OR  
HYALURONATE  
L4 486 SEA FILE=HCAPLUS ABB=ON PLU=ON L3 AND (L2 OR GLUCURONIC  
)  
L8 10 SEA FILE=HCAPLUS ABB=ON PLU=ON L4 AND (TOXIN OR TOXOID  
OR CARRIER)

L8 ANSWER 1 OF 10 HCAPLUS COPYRIGHT 2004 ACS on STN

ED Entered STN: 14 Nov 2003

ACCESSION NUMBER: 2003:892567 HCAPLUS

DOCUMENT NUMBER: 139:386334

TITLE: Production of monomeric calicheamicin derivative  
cytotoxic drug/**carrier** conjugatesINVENTOR(S): Kunz, Arthur; Moran, Justin Keith; Rubino,  
Joseph Thomas; Jain, Neera; Vidunas, Eugene  
Joseph; Simpson, John McLean; Robbins, Paul  
David; Merchant, Nishith; DiJoseph, John  
Francis; Ruppen, Mark Edward; Damle, Nitin  
Krishnaji; Popplewell, Andrew George; et al.

PATENT ASSIGNEE(S): Wyeth Holdings Corporation, USA

SOURCE: PCT Int. Appl., 186 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003092623	A2	20031113	WO 2003-US13910	20030502
WO 2003092623	A3	20040318		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			

US 2004082764 A1 20040429 US 2003-428894 20030502

PRIORITY APPLN. INFO.: US 2002-377440P P 20020502

AB The present invention relates to methods for. the production of  
monomeric cytotoxic drug/**carrier** conjugates (the  
"conjugates") with higher drug loading and substantially reduced low

conjugate fraction (LCF). Cytotoxic drug derivative/antibody conjugates, compns. comprising the conjugates and uses of the conjugates are also described. Particularly, the invention relates to anti-CD22 antibody-monomeric calicheamicin conjugates. The invention also relates to the conjugates of the invention, to methods of purification of the conjugates, to pharmaceutical compns. comprising the conjugates, and to uses of the conjugates.

IT 6556-12-3, Glucuronic acid 9004-61-9,

Hyaluronic acid

RL: ARG (Analytical reagent use); ANST (Analytical study); USES

(Uses)

(production of monomeric calicheamicin derivative cytotoxic drug/  
carrier conjugates)

L8 ANSWER 2 OF 10 HCAPLUS COPYRIGHT 2004 ACS on STN

ED Entered STN: 22 Nov 2002

ACCESSION NUMBER: 2002:888596 HCAPLUS

DOCUMENT NUMBER: 137:368571

TITLE: Immunogenic compositions of low molecular weight

hyaluronic acid and methods to prevent,  
treat and diagnose infections and diseases  
caused by group A and group C streptococci

INVENTOR(S):

Michon, Francis; Moore, Samuel; Laude-Sharp,  
Maryline; Blake, Milan

PATENT ASSIGNEE(S):

Baxter International Inc., USA; Baxter  
Healthcare S.A.

SOURCE:

PCT Int. Appl., 49 pp.  
CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002092131	A2	20021121	WO 2002-EP5310	20020510
WO 2002092131	A3	20030320		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
US 2002192205	A1	20021219	US 2001-853367	20010511
EP 1385554	A2	20040204	EP 2002-750926	20020510
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR			
BR 2002009562	A	20040330	BR 2002-9562	20020510
PRIORITY APPLN. INFO.:			US 2001-853367 A	20010511
			WO 2002-EP5310 W	20020510

AB The present invention provides antigenic compns. and methods for



treatment and prevention of infection and disease caused by group A and group C streptococci. In particular, the invention provides low mol. weight **hyaluronic acid**, low mol. weight **hyaluronic acid** linked to a **carrier** and compns. comprising them. The compns. elicit antibodies to low mol. weight **hyaluronic acid** which are cross-reactive with group A and C streptococci and which are minimally cross-reactive with native **hyaluronic acid**. The invention is particularly useful for providing both active and passive immunogenic protection for those infected with or at risk infection with group A and group C streptococci. Addnl., the present invention provides methods and compns. useful for diagnosing infections and diseases caused by group A and group C streptococci.

IT **6556-12-3, Glucuronic acid**

RL: BSU (Biological study, unclassified); BIOL (Biological study) (immunogenic compns. of low mol. weight **hyaluronic acid** and methods to prevent, treat and diagnose infections and diseases caused by group A and group C streptococci in relation to **Glucuronic acid**)

IT **9004-61-9DP, Hyaluronic acid, conjugates with polypeptide carriers**

RL: BPN (Biosynthetic preparation); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(repeating unit; immunogenic compns. of low mol. weight **hyaluronic acid** and methods to prevent, treat and diagnose infections and diseases caused by group A and group C streptococci)

L8 ANSWER 3 OF 10 HCAPLUS COPYRIGHT 2004 ACS on STN

ED Entered STN: 02 Aug 2002

ACCESSION NUMBER: 2002:575558 HCAPLUS

DOCUMENT NUMBER: 137:129910

TITLE: Cosmetic and pharmaceutical preparations containing a combination of acid protease enzymes and acidic buffers

INVENTOR(S): Bishop, Michael; Gillis, Glen; Norton, Scott J.

PATENT ASSIGNEE(S): Actim Organics, Inc., USA

SOURCE: U.S. Pat. Appl. Publ., 16 pp., Cont.-in-part of U.S. Ser. No. 354,687.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2002102285	A1	20020801	US 2002-59790	20020129
US 6656701	B2	20031202		
US 6569437	B1	20030527	US 1999-354687	19990716
PRIORITY APPLN. INFO.:			US 1999-354687	A2 19990716
			US 1996-664056	A3 19960613

AB Novel compns. comprising one or more of an acid protease and an acidic buffer, the acidic buffer comprising an acid and a pharmaceutically or cosmetically acceptable **carrier**, vehicle or excipient, useful for treating or preventing abnormal

biol. conditions, diseases or disorders, and/or for improving the texture or appearance of the skin, and/or for enhancing epidermal exfoliation and/or for enhancing epidermal cell renewal and to methods for the use of the compns. The acid protease comprises one or more proteolytic enzymes which exhibit proteolytic activity at pH values below that of the surface of the skin, i.e., approx. pH 5.5. The acidic buffer comprises at least one acidic buffering component that can reversibly disassoc. hydrogen ions and has buffering capacity at pH values below that of the surface of the skin, i.e., approx. pH 5.5. or mixts. thereof with a pharmaceutically or cosmetically acceptable **carrier**, vehicle or excipient. The buffer is capable of reducing the pH of the surface of the skin to less than pH 5.5 and is susceptible to neutralization by normal epidermal processes. Such types of abnormal biol. conditions, diseases or disorders include skin atrophy, i.e., the thinning and/or general degradation of the dermis often characterized by a decrease in collagen and/or elastin as well as decreased number, size and doubling potential of fibroblast cells, and other maladies including, but are not limited to dry skin, severe dry skin, dandruff, acne, keratosis, psoriasis, eczema, skin flakiness, pruritus, age spots, lentigines, melasmas, wrinkles, warts, blemished skin, hyperpigmented skin, hyperkeratotic skin, inflammatory dermatoses, age-related skin changes and skin in need of cleansers. A wash contained aspartic acid 1.5, deionized water 82.50, methylparaen 0.20, PEG-75 1.50, disodium EDTA 0.05, allantoin 0.25, glycereth-26 1.00, ethoxydiglycol 4.00, propylene glycol 4.00, and AFP-2000 5.00%.

IT 6556-12-3, Glucuronic acid 9004-61-9,

Hyaluronic acid

RL: COS (Cosmetic use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(cosmetic and pharmaceutical preps. containing combination of acid protease enzymes and acidic buffers)

L8 ANSWER 4 OF 10 HCAPLUS COPYRIGHT 2004 ACS on STN

ED Entered STN: 26 Oct 2000

ACCESSION NUMBER: 2000:755211 HCAPLUS

DOCUMENT NUMBER: 133:340208

TITLE: Novel compositions useful for delivering anti-inflammatory agents into a cell

INVENTOR(S): Unger, Evan C.; McCreery, Thomas; Sadewasser, David A.

PATENT ASSIGNEE(S): ImaRx Pharmaceutical Corp., USA

SOURCE: Eur. Pat. Appl., 78 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1046394	A2	20001025	EP 2000-303249	20000418
EP 1046394	A3	20011010		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				

09/853367

PRIORITY APPLN. INFO.: US 1999-294623 A 19990419

AB The present invention is directed, inter alia, to compns. and their use for delivering compds. into a cell. In a preferred embodiment, the compns. comprise, in combination with the compound to be delivered, an organic halide, a targeting ligand, and a nuclear localization sequence, optionally in the presence of a **carrier**. Ultrasound may be applied, if desired. The compns. are particularly suitable for the treatment of inflammatory diseases.

IT **9004-61-9, Hyaluronic acid**  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(drug **carrier**; peptide compns. useful for delivering anti-inflammatory agents into a cell)

IT **6556-12-3D, Glucuronic acid, polymers**  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(drug **carriers**; peptide compns. useful for delivering anti-inflammatory agents into a cell)

L8 ANSWER 5 OF 10 HCAPLUS COPYRIGHT 2004 ACS on STN

ED Entered STN: 17 Dec 1999

ACCESSION NUMBER: 1999:795937 HCAPLUS

DOCUMENT NUMBER: 132:32928

TITLE: Polymer **carrier** for cultivation of keratinocytes

INVENTOR(S): Labsky, Jiri; Vacik, Jiri; Smetana, Karel; Dvorankova, Barbora

PATENT ASSIGNEE(S): Ustav Makromolekularni Chemie Akademie Ved Ceske Republiky, Czech Rep.; Univerzita Karlova; 1. Lekarska Fakulta Univerzity Karlovy; 3. Lekarska Fakulta Univerzity Karlovy

SOURCE: PCT Int. Appl., 30 pp.  
CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9964563	A1	19991216	WO 1999-CZ17	19990609
W:	AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
CZ 292883	B6	20031217	CZ 1998-1803	19980610
CZ 292491	B6	20031015	CZ 1999-1946	19990602
CZ 292570	B6	20031015	CZ 1999-1947	19990602
AU 9940293	A1	19991230	AU 1999-40293	19990609
PRIORITY APPLN. INFO.:			CZ 1998-1803	A 19980610
			CZ 1999-1946	A 19990602
			CZ 1999-1947	A 19990602

09/853367

WO 1999-CZ17 W 19990609

AB A polymer **carrier** for keratinocyte cultivation on biol.  
active polymer bases, prepared by radical polymerization of a  
polymerization mixture  
containing 1-95 weight% of a radical-polymerizable monomer, 0.0-10 weight%  
of

a crosslinker, 0.1-5 weight% of an initiator, 0.0-60 weight% of a solvent,  
0.0-50 weight% of a polymerizable derivative of a sterically hindered  
amine, 0.0-60 weight% of a polymerizable saccharide derivative, and  
polymerizable derivs. of reactive  $\omega$ -acryloyl- or methacryloyl  
amino acids, which can be used for addnl. modification of polymer  
**carriers** with appropriate saccharide or sterically hindered  
amine derivs. A hydrophilic polymer **carrier** with no  
bonded polymerizable saccharide or sterically hindered amine derivs.  
can be activated by sorption of specific derivs. of biol. active  
substances on the **carrier** surface. A polymer prepared by  
thermal polymerization of 2-hydroxyethyl methacrylate, (2-  
hydroxyethoxy)ethyl methacrylate, methacrylic acid, ethylene  
dimethacrylate, and 2-methacryloyloxyethyl 2-acetamino-2-deoxy-D-  
glucopyranoside gave the best results for cultivation of human  
keratinocytes.

IT 6556-12-3P, Glucuronic acid

RL: BUU (Biological use, unclassified); DEV (Device component use);  
SPN (Synthetic preparation); BIOL (Biological study); PREP  
(Preparation); USES (Uses)

(polymer **carrier** containing; polymer **carrier** for  
cultivation of keratinocytes)

IT 9004-61-9DP, Hyaluronic acid, polymer  
**carrier**-adsorbed

RL: BUU (Biological use, unclassified); DEV (Device component use);  
SPN (Synthetic preparation); BIOL (Biological study); PREP  
(Preparation); USES (Uses)

(polymer **carrier** for cultivation of keratinocytes)

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR  
THIS RECORD. ALL CITATIONS AVAILABLE IN  
THE RE FORMAT

L8 ANSWER 6 OF 10 HCAPLUS COPYRIGHT 2004 ACS on STN

ED Entered STN: 08 Jun 1999

ACCESSION NUMBER: 1999:350607 HCAPLUS

DOCUMENT NUMBER: 131:14825

TITLE: A method of increasing nucleic acid synthesis  
with ultrasound

INVENTOR(S): Unger, Evan C.; McCreery, Thomas; Sadewasser,  
David

PATENT ASSIGNEE(S): ImaRx Pharmaceutical Corp., USA

SOURCE: PCT Int. Appl., 124 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9925385	A1	19990527	WO 1998-US23843	19981111

Searcher : Shears 571-272-2528

W: AU, CA, JP

RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC,  
NL, PT, SE

AU 9913906	A1	19990607	AU 1999-13906	19981111
PRIORITY APPLN. INFO.:			US 1997-971540	19971117
			WO 1998-US23843	19981111

OTHER SOURCE(S): MARPAT 131:14825

AB The present invention is directed to a method of increasing nucleic acid synthesis in a cell comprising administering to the cell a therapeutically effective amount of ultrasound for a therapeutically effective time such that said administration of said ultrasound results in said increased nucleic acid synthesis. The nucleic acid sequence may comprise an endogenous sequence or an exogenous sequence. In particular, the invention is directed to increasing the expression of stress proteins and repair proteins.

IT 6556-12-3D, Glucuronic acid, polymers containing

9004-61-9, Hyaluronic acid 9004-61-9D,

Hyaluronic acid, derivative

RL: BPR (Biological process); BSU (Biological study, unclassified);

BUU (Biological use, unclassified); THU (Therapeutic use); BIOL

(Biological study); PROC (Process); USES (Uses)

(carrier; method of increasing nucleic acid synthesis  
with ultrasound)

REFERENCE COUNT: 12 THERE ARE 12 CITED REFERENCES AVAILABLE  
FOR THIS RECORD. ALL CITATIONS AVAILABLE  
IN THE RE FORMAT

L8 ANSWER 7 OF 10 HCAPLUS COPYRIGHT 2004 ACS on STN

ED Entered STN: 12 May 1999

ACCESSION NUMBER: 1999:290916 HCAPLUS

DOCUMENT NUMBER: 131:106753

TITLE: **Hyaluronic** acid-based polymers as cell  
carriers for tissue-engineered repair of  
bone and cartilage

AUTHOR(S): Solchaga, Luis A.; Dennis, James E.; Goldberg,  
Victor M.; Caplan, Arnold I.

CORPORATE SOURCE: Skeletal Research Center, Department of Biology,  
Case Western Reserve University, Cleveland, OH,  
44106-7080, USA

SOURCE: Journal of Orthopaedic Research (1999), 17(2),  
205-213

CODEN: JOREDR; ISSN: 0736-0266

PUBLISHER: Journal of Bone and Joint Surgery, Inc.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Culture-expanded bone marrow-derived mesenchymal progenitor cells differentiate into chondrocytes or osteoblasts when implanted s.c. in vivo in combination with an appropriate delivery vehicle. This in vivo implantation technique is used to test new materials as putative delivery vehicles in skeletal tissue-engineering models. HYAFF 11 and ACP sponges, 2 biomaterials based on **hyaluronic** acid modified by esterification of the carboxyl groups of the **glucuronic** acid, were tested as osteogenic or chondrogenic delivery vehicles for rabbit mesenchymal progenitor cells and compared with a well characterized porous calcium phosphate ceramic delivery vehicle. The implant materials were examined by SEM for

differences in pore structure or cellular interactions, were quantified for their ability to bind and retain mesenchymal progenitor cells, and were examined histol. for their ability to support osteogenesis and chondrogenesis after s.c. implantation into nude mice. The ACP sponge bound the same number of cells as fibronectin-coated ceramic, whereas the HYAFF 11 sponge bound 90% more. When coated with fibronectin, ACP and HYAFF 11 bound, resp., 100 and 130% more cells than the coated ceramics. HYAFF 11 sponge composites retained their integrity after the 3 or 6-wk incubation period in the animals and were processed for histomorphometric anal. As a result of rapid degradation or resorption in vivo, ACP sponges could not be recovered after implantation and could not be analyzed. HYAFF 11 sponges presented more area available for cell attachment and more available volume for newly formed tissue. Following loading with mesenchymal progenitor cells and implantation, the pores of the sponges contained more bone and cartilage than the pores of ceramic cubes at either time point. Thus, relative to ceramic, HYAFF 11 sponges allow incorporation of twice as many cells and produce a 30% increase in the relative amount of bone and cartilage/unit area. Hence, the **hyaluronic** acid-based delivery vehicles are superior to porous calcium phosphate ceramic with respect to the number of cells loaded per unit volume of implant, and HYAFF 11 sponges are superior to the ceramics with regard to the amount of bone and cartilage formed. Addnl., **hyaluronic** acid-based vehicles have the advantage of degradation/resorption characteristics that allow complete replacement of the implant with newly formed tissue.

IT 9004-61-9D, **Hyaluronic** acid, derivs.

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(**hyaluronic** acid-based polymers as cell  
**carriers** for tissue-engineered repair of bone and  
cartilage)

REFERENCE COUNT: 35 THERE ARE 35 CITED REFERENCES AVAILABLE  
FOR THIS RECORD. ALL CITATIONS AVAILABLE  
IN THE RE FORMAT

L8 ANSWER 8 OF 10 HCAPLUS COPYRIGHT 2004 ACS on STN

ED Entered STN: 31 Oct 1996

ACCESSION NUMBER: 1996:641390 HCAPLUS

DOCUMENT NUMBER: 125:269867

TITLE: Insoluble **carrier**-conjugated  
glucosaminoglycan for capturing glycoHb and  
fructosamine for conventional quantification

INVENTOR(S): Funayama, Masashi

PATENT ASSIGNEE(S): Funayama Masashi, Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 7 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 08226920	A2	19960903	JP 1995-70373	19950220
PRIORITY APPLN. INFO.:			JP 1995-70373	19950220
AB Method using glucosaminoglycan conjugated with insol.				

**carrier** is disclosed for capture of glycoHb. and fructosamine. The captured glycoHb. and fructosamine are then quantitated by traditional methods. Thus, microplate-immobilized **hyaluronic acid**, polygalacturonic acid, or chondroitin sulfate were prepared as capturing agents. Similarly, interpenetrating polymer networks containing glucosaminoglycan were also prepared for the same purpose.

- IT **6556-12-3P, D-Glucuronic acid**  
 RL: BUU (Biological use, unclassified); SPN (Synthetic preparation);  
 BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (insol. polymer **carrier**-conjugated glucosaminoglycan is prepared for capturing glycoHb and fructosamine for quantification)
- IT **9004-61-9P, Hyaluronic acid**  
 RL: BUU (Biological use, unclassified); SPN (Synthetic preparation);  
 BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (microplate-immobilized; insol. polymer **carrier**-conjugated glucosaminoglycan is prepared for capturing glycoHb and fructosamine for quantification)

L8 ANSWER 9 OF 10 HCAPLUS COPYRIGHT 2004 ACS on STN

ED Entered STN: 20 Aug 1994

ACCESSION NUMBER: 1994:483790 HCAPLUS

DOCUMENT NUMBER: 121:83790

TITLE: Functionalized Derivatives of **Hyaluronic Acid Oligosaccharides: Drug Carriers** and Novel Biomaterials

AUTHOR(S): Pouyani, Tara; Prestwich, Glenn D.

CORPORATE SOURCE: Department of Chemistry, University at Stony Brook, Stony Brook, NY, 11794-3400, USA

SOURCE: Bioconjugate Chemistry (1994), 5(4), 339-47  
 CODEN: BCCHES; ISSN: 1043-1802

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Oligosaccharides derived from **hyaluronic acid (HA)**, a naturally occurring linear polysaccharide composed of repeating disaccharide units of N-acetyl-D-glucosamine and D-**glucuronic acid**, can be chemical modified to introduce a pendant amine-like functionality (patent application pending). Covalent attachment of steroidal and nonsteroidal antiinflammatory drugs to functionalized HA oligosaccharides was accomplished with the incorporation of hydrolytically labile bonds. Further derivatization of the pendant group with homobifunctional crosslinkers allowed the introduction of covalent crosslinks. Chemical-modified HA oligosaccharides were unambiguously characterized in solution by high-resolution 1H NMR spectroscopy.

- IT **9004-61-9D, Hyaluronic acid, derivs.**  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (functionalized, as drug **carriers**, preparation of)
- IT **9004-61-9D, Hyaluronic acid, sugar derivs.**  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (reaction of, with dicarboxylic acid hydrazides)

L8 ANSWER 10 OF 10 HCAPLUS COPYRIGHT 2004 ACS on STN

ED Entered STN: 03 Feb 1993

ACCESSION NUMBER: 1993:45463 HCAPLUS

DOCUMENT NUMBER: 118:45463

09/853367

TITLE: Skin cosmetics containing alkylsilanols and polypeptides and polysaccharides  
INVENTOR(S): Tran Anh Tuan  
PATENT ASSIGNEE(S): Societe S.A. Innovation Scientific Dermatologique, Fr.  
SOURCE: Fr. Demande, 16 pp.  
CODEN: FRXXBL  
DOCUMENT TYPE: Patent  
LANGUAGE: French  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 2667240	A1	19920403	FR 1990-11914	19900927
FR 2667240	B1	19921127		

PRIORITY APPLN. INFO.: FR 1990-11914 19900927  
OTHER SOURCE(S): MARPAT 118:45463  
AB Skin compns. are prepared comprising polymer microspheres which are **carriers** for the cosmetic agents such as alkylsilanols and a polysaccharide and polypeptide. A composition was prepared from dimethylsilane diol 0.264, mucopolysaccharide 1.200, Na **hyaluronate** 0.12, polystyrene nanospheres 4.0, thickener (Carbopol) 1.6, and surfactant 1.72%. The nanospheres released the active agents in 10 h.  
IT **6556-12-3, D-Glucuronic acid 9004-61-9, Hyaluronic acid**  
RL: BIOL (Biological study)  
(cosmetic compns. containing peptides and alkylsilanols and)

FILE 'MEDLINE, BIOSIS, EMBASE, WPIDS, JICST-EPLUS, JAPIO, PASCAL, DISSABS, FEDRIP' ENTERED AT 11:42:27 ON 11 MAY 2004

L9 36 S L8  
L10 33 DUP REM L9 (3 DUPLICATES REMOVED)

L10 ANSWER 1 OF 33 WPIDS COPYRIGHT 2004 THOMSON DERWENT on STN  
ACCESSION NUMBER: 2004-053034 [05] WPIDS  
DOC. NO. CPI: C2004-021193  
TITLE: Preparing monomeric cytotoxic drug/**carrier** conjugates for treating cancer, comprises incubating a cytotoxic drug derivative with a proteinaceous **carrier** in a non-nucleophilic, protein-compatible buffered solution.  
DERWENT CLASS: B04 D16  
INVENTOR(S): DAMLE, N K; DIJOSEPH, J F; JAIN, N; KUNZ, A; MERCHANT, N; MORAN, J K; POPPLEWELL, A G; ROBBINS, P D; RUBINO, J T; RUPPEN, M E; SIMPSON, J M; VIDUNAS, E J  
PATENT ASSIGNEE(S): (AMHP) WYETH HOLDINGS CORP  
COUNTRY COUNT: 103  
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 2003092623	A2	20031113	(200405)*	EN	186

Searcher : Shears 571-272-2528



09/853367

RW: AT BE BG CH CY CZ DE DK EA EE ES FI FR GB GH GM GR HU IE IT  
KE LS LU MC MW MZ NL OA PT RO SD SE SI SK SL SZ TR TZ UG ZM  
ZW  
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ  
DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP  
KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ  
NI NO NZ OM PH PL PT RO RU SC SD SE SG SK SL TJ TM TN TR TT  
TZ UA UG US UZ VC VN YU ZA ZM ZW  
US 2004082764 A1 20040429 (200429)

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2003092623	A2	WO 2003-US13910	20030502
US 2004082764	A1 Provisional	US 2002-377440P	20020502
		US 2003-428894	20030502

PRIORITY APPLN. INFO: US 2002-377440P 20020502; US  
2003-428894 20030502

AN 2004-053034 [05] WPIDS  
AB WO2003092623 A UPAB: 20040120

NOVELTY - Preparing monomeric cytotoxic drug/**carrier** conjugates with reduced low conjugated fraction (LCF) having the formula (I) comprises incubating a mixture of a cytotoxic drug derivative and a proteinaceous **carrier** in a non-nucleophilic, protein-compatible buffered solution to produce a monomeric cytotoxic drug/**carrier** conjugate.

DETAILED DESCRIPTION - Preparing monomeric cytotoxic drug/**carrier** conjugates having reduced LCF comprises: (a) adding the cytotoxic drug derivative to the proteinaceous **carrier**, where the cytotoxic drug derivative is 4.5-11% by weight of the proteinaceous **carrier**; (b) incubating the cytotoxic drug derivative and a proteinaceous **carrier** in a non-nucleophilic, protein-compatible, buffered solution having a pH in the range from about 7-9 to produce a monomeric cytotoxic drug/**carrier** conjugate, where the solution further comprises (i) an organic co-solvent, and (ii) an additive comprising at least one C6-C18 carboxylic acid or its salt, and where the incubation is conducted at a temperature of 30-35 deg. C for 15 minutes-24 hours; and (c) subjecting the conjugate to a chromatographic separation process to separate monomeric cytotoxic drug derivative/proteinaceous **carrier** conjugates with a loading of 4-10% by weight cytotoxic drug and with low conjugated fraction (LCF) below 10% from unconjugated proteinaceous **carrier**, cytotoxic drug derivative, and aggregated conjugates. The monomeric cytotoxic drug/**carrier** conjugate has the formula (I)  
Pr(-X-W)<sub>m</sub> where:

Pr = a proteinaceous **carrier**;  
X = a linker that comprises a product of any reactive group that can react with a proteinaceous **carrier**;  
W = a cytotoxic drug;  
M = the average loading for a purified conjugation product such that the cytotoxic drug constitutes 7-9% of the conjugate by weight; and

(-X-W)<sub>m</sub> = a cytotoxic drug derivative

INDEPENDENT CLAIMS are also included for the following:

- (1) a monomeric cytotoxic drug derivative/**carrier** conjugate produced by the method above;
- (2) a monomeric calicheamicin derivative/anti-CD22 antibody conjugate having the formula (II) Pr(-X-S-S-W)<sub>m</sub>;
- (3) a method for the preparation of a stable lyophilized composition of a monomeric cytotoxic drug derivative/**carrier** conjugate;
- (4) a composition comprising a monomeric cytotoxic drug derivative/**carrier** conjugate prepared by the method above;
- (5) a method of treating a subject with a proliferative disorder by administering a composition of (4).

Formula (II) Pr(-X-S-S-W)<sub>m</sub> where

Pr = an anti-CD22 antibody;

X = a hydrolyzable linker comprising a product of any reactive group that can react with an antibody;

W = a calicheamicin radical;

m = the average loading for a purified conjugation product such that the calicheamicin constitutes 4-10% of the conjugate by weight; and

(-X-S-S-W)<sub>m</sub> = a calicheamicin derivative

ACTIVITY - Cytostatic.

MECHANISM OF ACTION - None given.

USE - The method is useful for producing monomeric cytotoxic drug/**carrier** conjugates having reduced low conjugated fraction. The conjugates or compositions comprising the monomeric cytotoxic drug derivative/**carrier** conjugates are useful for treating a proliferative disorder, particularly cancer (e.g. carcinoma or sarcoma) or a B-cell malignancy, such as leukemia expressing cell surface antigen CD22, lymphoma expressing cell surface antigen CD22, Non-Hodgkin's lymphoma (claimed).

ADVANTAGE - The new method is an improved conjugation process for the production of conjugates that result insignificantly lower levels of LCF without any significant reduction in the levels of the LCF, but also results in a significant reduction in aggregation from previous processes, and reduces substantially increased drug loading.

Dwg.0/29

L10 ANSWER 2 OF 33 WPIDS COPYRIGHT 2004 THOMSON DERWENT on STN  
 ACCESSION NUMBER: 2003-663333 [62] WPIDS  
 CROSS REFERENCE: 2002-713307 [77]; 2003-221445 [21]; 2003-256286 [25]  
 DOC. NO. CPI: C2003-180135  
 TITLE: New Helicobacter pylori binding substance, useful for treating e.g. gastritis, gastric ulcer, gastric ulcer, non-Hodgkin's lymphoma skin disease.  
 DERWENT CLASS: B04 B05 D13  
 INVENTOR(S): ANGSTROM, J; HELIN, J; KARLSSON, K; MILLER-PODRAZA, H; NATUNEN, J; TENEBERG, S; ANGSTROEM, J  
 PATENT ASSIGNEE(S): (BIOT-N) BIOTIE THERAPIES OYJ  
 COUNTRY COUNT: 102  
 PATENT INFORMATION:

PATENT NO	KIND DATE	WEEK	LA	PG
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Searcher : Shears 571-272-2528

09/853367

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WO 2003059924 A1 20030724 (200362)\* EN 40  
RW: AT BE BG CH CY CZ DE DK EA EE ES FI FR GB GH GM GR HU IE IT  
KE LS LU MC MW MZ NL OA PT SD SE SI SK SL SZ TR TZ UG ZM ZW  
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ  
DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP  
KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ  
NO NZ OM PH PL PT RO RU SC SD SE SG SK SL TJ TM TN TR TT TZ  
UA UG US UZ VC VN YU ZA ZM ZW  
AU 2003201619 A1 20030730 (200421)

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2003059924	A1	WO 2003-FI39	20030120
AU 2003201619	A1	AU 2003-201619	20030120

FILING DETAILS:

PATENT NO	KIND	PATENT NO
AU 2003201619	A1 Based on	WO 2003059924

PRIORITY APPLN. INFO: WO 2002-FI43 20020118

AN 2003-663333 [62] WPIDS

CR 2002-713307 [77]; 2003-221445 [21]; 2003-256286 [25]

AB WO2003059924 A UPAB: 20040326

NOVELTY - Helicobacter pylori binding substance is new.

DETAILED DESCRIPTION - Helicobacter pylori binding substance (S1) of formula (Hex1(A)q1(NAc)rly3)s1Gal(NAc)r2 beta 4Glc(A)q2(NAc)r3 (I) is new, provided that (I) does not comprise two non-derivatized beta -linked **glucuronic** acid units.

q1, q2, r1, r2, r3, s1 = 0 or 1;

Hex1, Hex2 = hexose structures (preferably galactose (Gal) or glucose (Glc) modified by A and/or NAc group);

y = alpha or beta anomeric structure of terminal monosaccharide residue;

A = glucuronamide;

provided that:

(a) at least r2 is 1 or q2 is 1, and A indicates a glucuronamide when at least q1 or q2 is 1;

(b) when s1 is 0, then:

(1) q2 is 1 and r2 is 0; or

(2) q2 = r2 = r3 = 1; or

(3) q2 = r2 = 1, r3 = 0 and A indicates a glucuronamide

(c) when s is 1, then when r2 is 1 then at least q1 is 1 or q2 is 1

N.B. Hex2 is defined but does not appear in the formula or list of definitions.

INDEPENDENT CLAIMS are also included for the following:

(1) a Helicobacter pylori binding substance (S2) comprising oligosaccharide sequence of formula (Hex1'(A)q1(NAc)r1 alpha / beta 3)sGal(NAc)r2 beta 4Glc(A)q2(NAc)r3 (II) or its analog or derivative:

s = 0 or 1;

Hex1' = Gal, Glc or mannose (Man).

Provided that at least one of r2 or q2 is 1;

(2) *Helicobacter pylori* binding substance (S2) consisting of a micelle comprising at least one (S1);

(3) a nutritional additive or composition comprising (S2);

(4) method (M) of screening *Helicobacter pylori* binding substances comprising: modifying at least one hydroxyl or acetamido group of (S2) into another chemical group; and determining *Helicobacter pylori* binding or inhibiting substances from the modified oligosaccharide sequence;

(5) method (M1) of preparing chondroitin oligosaccharides from chondroitin sulfates involving: removing sulfates from chondroitin sulfate by chemical hydrolysis; and specifically hydrolyzing glycosidic bonds between GalNAc and GlcA;

(6) method (M2) of preparing amidated **glucuronic** acid comprising oligosaccharides and monosaccharides from **glucuronic** acid comprising polysaccharides, involving: optionally oxidating 6-hydroxyl of a polysaccharide to carboxylic acid group, when the substrate does not comprise uronic acid group or oxidable 6-hydroxyl groups; amidating **glucuronic** acid residues of the **glucuronic** acid comprising polysaccharide; hydrolyzing polysaccharide to fragments; and optionally isolating oligosaccharide by chromatography; and

(7) method (M3) of screening *Helicobacter pylori* binding substance analogs involving: docking by molecular modeling a carbohydrate binding molecule of *Helicobacter pylori* in silica; designing binding active analogs by allowing determination of binding interactions and positions for possible additional binding interactions; and determining *Helicobacter pylori* binding or inhibiting substances from the modified carbohydrate binding molecules (preferably (S2)).

ACTIVITY - Antiinflammatory; Antiulcer; Hepatotropic; Dermatological; Cardiant; Immunosuppressive; Antianemic; Gastrointestinal-Gen.; Antiulcer; Cytostatic; Hepatotropic; Antibacterial; Virucide.

MECHANISM OF ACTION - None given in the source material.

USE - As *Helicobacter pylori* binding or inhibiting substance for treating conditions due to the presence of *Helicobacter pylori* in the gastrointestinal tract (e.g. chronic superficial gastritis, gastric ulcer, duodenal ulcer, gastric adenocarcinoma, non-Hodgkin lymphoma in human stomach, liver disease, pancreatic disease, skin disease, heart disease, autoimmune disease (e.g. autoimmune gastritis and pernicious anemia), non-steroid anti-inflammatory drug (NSAID) related gastric disease) and for the prevention of sudden infant death syndrome; for the diagnosis of a condition due to infection by *Helicobacter pylori*; in a nutritional additive (e.g. infant food); for the identification of bacterial adhesion; for the production of a vaccine against *Helicobacter pylori*; for typing *Helicobacter pylori*; in *Helicobacter* binding assays; in binding bacteria, **toxin** (preferably **toxin** of *Clostridium difficile*) and viruses; as a nutritional additive or a part of a nutritional additive; and as functional food (e.g. beverage, infant formula and animal feed) (all claimed).

ADVANTAGE - The methods are cost effective and the sequences are stable under biological conditions.

Dwg.0/4

09/853367

L10 ANSWER 3 OF 33 WPIDS COPYRIGHT 2004 THOMSON DERWENT on STN  
ACCESSION NUMBER: 2003-482146 [45] WPIDS  
DOC. NO. NON-CPI: N2003-383447  
DOC. NO. CPI: C2003-128880  
TITLE: Identifying a hematopoietic stem cell (HSC) or its progeny for treating cancer, comprises obtaining a cell sample including HSC, detecting the presence of a carbohydrate sequence, and identifying HSC or its progeny having the sequence.  
DERWENT CLASS: B04 D16 S03  
INVENTOR(S): HAYLOCK, D N; NILSSON, S K; SIMMONS, P J  
PATENT ASSIGNEE(S): (MACC-N) MACCALLUM CANCER INST PETER  
COUNTRY COUNT: 101  
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG															
WO 2003038071	A1	20030508	(200345)*	EN	36															
RW:	AT	BE	BG	CH	CY	CZ	DE	DK	EA	EE	ES	FI	FR	GB	GH	GM	GR	IE	IT	KE
	LS	LU	MC	MW	MZ	NL	OA	PT	SD	SE	SK	SL	SZ	TR	TZ	UG	ZM	ZW		
W:	AE	AG	AL	AM	AT	AU	AZ	BA	BB	BG	BR	BY	BZ	CA	CH	CN	CO	CR	CU	CZ
	DE	DK	DM	DZ	EC	EE	ES	FI	GB	GD	GE	GH	GM	HR	HU	ID	IL	IN	IS	JP
	KE	KG	KP	KR	KZ	LC	LK	LR	LS	LT	LU	LV	MA	MD	MG	MK	MN	MW	MX	MZ
	NO	NZ	OM	PH	PL	PT	RO	RU	SD	SE	SG	SI	SK	SL	TJ	TM	TN	TR	TT	TZ
	UA	UG	US	UZ	VC	VN	YU	ZA	ZM	ZW										

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2003038071	A1	WO 2002-AU1443	20021024

PRIORITY APPLN. INFO: AU 2001-8565 20011030

AN 2003-482146 [45] WPIDS

AB WO2003038071 A UPAB: 20030716

NOVELTY - Identifying a hematopoietic stem cell (HSC) or its progeny comprises obtaining a cell sample including HSC or its progeny, detecting the presence of at least one carbohydrate sequence having at least one disaccharide repeat of **glucuronic** acid and N-acetylglucosamine or its equivalent, and identifying HSC or its progeny having the sequence or its equivalent.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are included for the following:

(1) a method for obtaining a cell population enriched in HSCs or their progeny, comprising obtaining a cell population comprising HSCs or their progeny, detecting the presence of **hyaluronic** acid (HA), **hyaluronic** acid synthase (HAS) or its fragment on a cell, and selecting for cells which are identified by the presence of HA, HAS or its fragment on the cell;

(2) a method of removing HSCs or their progeny from a population, comprising obtaining a cell population having HSCs or their progeny, detecting the presence of HA, HAS or its fragment on a cell, and selecting out those cells which are identified by the presence of HA, HAS or its fragment on the cell;

(3) a method for isolating subpopulations within an HSC population, comprising using any of the above methods and specific markers for specific cell lineages to identify and isolate the cell lineages;

(4) a diagnostic assay for determining numbers of HSCs or their progeny in a sample where the cells and antibody or marker are combined under conditions sufficient to allow specific binding of the antibody or marker to HA or HAS and the HSCs or their progeny which are then quantitated;

(5) a method of enriching a population of HSCs or their progeny, comprising combining a mixture of HSCs or progeny with an antibody, marker or binding protein that recognizes and binds to HA, HAS or its fragment under conditions that allow the antibody, marker or binding protein to bind to HA, HAS or its fragment, and separating the cells recognized by the antibody, marker or binding protein to obtain a population substantially enriched in HSCs or progeny;

(6) an enriched population of HSCs or progeny prepared by the methods cited above;

(7) a cell population having a decreased HSC population relative to a control cell population with no negative selection for HSC or progeny;

(8) a composition of enriched HSCs and their progeny, comprising an enriched population of cells including CD34+, CD38+, thyl+ and HA+ cells;

(9) methods of measuring the content of HSC or its progeny, comprising obtaining a cell population comprising HSC or its progeny, combining the cell population with a binding protein or antibody for HA, HAS or its fragment, selecting for those cells which are identified by the binding protein or antibody, and quantifying the amount of selected cells relative to the quantity of cells in the cell population prior to selection with the binding protein or antibody;

(10) a composition for detecting HSC or its progeny in a population, comprising an indicator of HA, HAS or its fragment, and a **carrier**;

(11) a method of diagnosing a condition associated with HSC or its progeny by identifying the presence of HSC or its progeny in a cell population;

(12) a method of controlling proliferation and/or differentiation in an HSC or its progeny, comprising modulating the expression and/or activity of HA, HAS or its fragment in an HSC or its progeny; and

(13) a method of treating an HSC associated condition, comprising administering an amount of a composition in (8).

ACTIVITY - Cytostatic; Antibacterial; Virucide; Antianemic. No biological data given.

MECHANISM OF ACTION - Cell therapy.

USE - The method or HSC is useful in treating or diagnosing, or in preparing a medicament for treating or diagnosing, HSC related or associated conditions, such as leukemia, carcinoma, sarcoma or general infections causing an increase in the activity of HSC or its progeny in the hematopoietic stem cell populations or lymphoid lineages. The HA or HAS may be used to provide a population substantially devoid of HSCs or their progeny. The composition is useful in autologous engraftment, in correcting genetic defects or

providing genetic capabilities naturally lacking in the HSCs or their progeny, or in isolating or defining factors associated with regeneration and differentiation of HSCs or their progeny. The cells are used to reconstitute an immunocompromised host or as a source of cells for specific lineages, by providing for their maturation, proliferation and differentiation into selected lineages with factors such as erythropoietin, colony stimulating factors, interleukins or stromal cells associated with HSC or its progeny. The HSC or its progeny may also be used to isolate and evaluate factors associated with differentiation and maturation of hematopoietic cells, or to treat genetic diseases associated with HSCs (e.g. beta -thalassemia, sickle cell anemia or a deficiency in adenosine deaminase, recombinase or recombinase regulatory gene) by genetic modification of autologous or allogeneic stem cells (all claimed).  
Dwg.0/6

L10 ANSWER 4 OF 33 WPIDS COPYRIGHT 2004 THOMSON DERWENT on STN  
 ACCESSION NUMBER: 2003-810948 [76] WPIDS  
 CROSS REFERENCE: 2002-026007 [03]; 2004-088823 [09]  
 DOC. NO. CPI: C2003-225283  
 TITLE: Preparation of hydrophilic N-linked glycosyl prodrug compound useful in the treatment of e.g. neurological disorder involves N-linking central nervous system acting prodrug with saccharide to form amide or amine bond.  
 DERWENT CLASS: B05 D22  
 INVENTOR(S): CHRISTIAN, S T  
 PATENT ASSIGNEE(S): (CHRI-I) CHRISTIAN S T  
 COUNTRY COUNT: 1  
 PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
US 2003119761	A1	20030626	(200376)*		32

## APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
US 2003119761	A1 CIP of	US 2000-547506	20000412
		US 2002-198798	20020718

PRIORITY APPLN. INFO: US 2002-198798 20020718; US  
 2000-547506 20000412

AN 2003-810948 [76] WPIDS  
 CR 2002-026007 [03]; 2004-088823 [09]  
 AB US2003119761 A UPAB: 20040205

NOVELTY - Preparation of hydrophilic N-linked glycosyl prodrug compound (a) for neuraxial delivery involves N-linking CNS acting prodrug compound with saccharide moiety to form amide or amine bond between the CNS acting prodrug compound and the saccharide moiety.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are included for the following:

(1) a pharmaceutical composition (I) comprising (a) and

formulary (b). (a) comprises CNS acting prodrug compound covalently linked with a saccharide through amide or amine bond. (b) comprises an agent (c). (c) is additive, stabilizer, **carrier**, binder, buffer, excipient, emollient, disintegrant, lubricating agent, antimicrobial agent or preservative. The saccharide moiety is not cyclodextrin or glucuronide;

(2) preparation of (I) involving N-linking CNS acting prodrug compound with saccharide moiety to form amide or amine bond between the CNS acting prodrug compound and the saccharide moiety, and formulating (a) into (I) by addition of (c);

(3) treating neurological dysfunction involving administering a pharmaceutical composition comprising compound of formula A-B-D-E (II);

(4) improving aqueous solubility and blood brain barrier penetrability of drug involving forming a covalent chemical bond between the drug and sugar or saccharide. The drug comprises amide or amine group and is bonded to the sugar or saccharide comprising (II); and

(5) treating a subject requiring metabolic replacement therapy involving administering a therapeutic compound comprising hydrophilic compound transportable intact by intestinal glucose transporter, transportable intact in blood, transportable intact by endothelial cells at blood brain barrier and metabolizable by neuronal cell. The therapeutic compound further comprises compound binding to dopamine receptor and metabolizable in the neuronal cell.

A = CNS-acting prodrug compound;

B = lower alkyl;

D = nitrogen linker amine or amide;

E = saccharide.

Provided that E is not cyclodextrin or glucuronide.

ACTIVITY - Neuroprotective; Antimicrobial; Anticonvulsant; Neuroleptic; Nootropic; Antidepressant; Antiparkinsonian; Tranquillizer; Vasotropic; Cytostatic; Uropathic; Anesthetic; Hypertensive; Hypotensive; Analgesic; Antialcoholic; Antiaddictive; Antianginal; Hepatotropic; Cerebroprotective; Antimicrobial; Antibacterial; Virucide; Fungicide; Cardiovascular-Gen.; Antiparasitic.

MECHANISM OF ACTION - Dopamine receptor binder.

USE - For neuraxial delivery and for treating neurological dysfunction; improving aqueous solubility and blood brain barrier penetrability of drug; for treating a subject requiring metabolic replacement therapy e.g. patient with neurological dysfunction, Parkinson's disease and Parkinson's related disease (claimed) in the treatment of peripheral and central neurological dysfunction e.g. infectious disease, epilepsy, impaired motor dysfunction, schizophrenia, cognition, depression, behavior and mood disorder, anxiety, stress, vascular disease, cancer, urinary disease; in anesthesia, sedation, hypnosis, analgesia, locomotor deficiency, hyperprolactinemia, Tourette's syndrome, Huntington's disease, psychosis, chronic psychiatric illness, bipolar disorder, chronic alcoholism, cocaine abuse, attention deficit disorder, physiological stress, coronary hypertension, angina, Wilson's disease and tardive dyskinesia and microbial infection caused by e.g. bacteria, virus, fungus, rickettsia, mycoplasma, prion agent and parasite, hypotension, cardiovascular disease and hypertension.

ADVANTAGE - (a) has good aqueous solubility and pharmacokinetic



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half-life in blood; is transportable by saccharide transporters in the gastrointestinal tract and in the endothelial cells at the blood brain barrier. (a) promotes and up-regulates intestinal and blood brain barrier transport of poorly aqueous soluble amine and amide containing pharmaceutical agents.  
Dwg.0/0

L10 ANSWER 5 OF 33 WPIDS COPYRIGHT 2004 THOMSON DERWENT on STN  
ACCESSION NUMBER: 2003-067844 [06] WPIDS  
DOC. NO. CPI: C2003-017858  
TITLE: Immunogenic conjugate molecule useful for the prevention or treatment of streptococcal infection comprises **hyaluronic** acid covalently bound to an immunological polypeptide **carrier**.  
DERWENT CLASS: B04  
INVENTOR(S): BLAKE, M; LAUDE-SHARP, M; MICHON, F; MOORE, S  
PATENT ASSIGNEE(S): (BLAK-I) BLAKE M; (LAUD-I) LAUDE-SHARP M; (MICH-I) MICHON F; (MOOR-I) MOORE S; (BAXT) BAXTER HEALTHCARE SA; (BAXT) BAXTER INT INC  
COUNTRY COUNT: 99  
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 2002092131	A2	20021121	(200306)*	EN	25
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZM ZW					
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PH PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW					
US 2002192205	A1	20021219	(200306)		
EP 1385554	A2	20040204	(200410)	EN	
R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI TR					
BR 2002009562	A	20040330	(200424)		
KR 2003096369	A	20031224	(200426)		

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2002092131	A2	WO 2002-EP5310	20020510
US 2002192205	A1	US 2001-853367	20010511
EP 1385554	A2	EP 2002-750926	20020510
		WO 2002-EP5310	20020510
BR 2002009562	A	BR 2002-9562	20020510
		WO 2002-EP5310	20020510
KR 2003096369	A	KR 2003-714583	20031110

FILING DETAILS:

PATENT NO	KIND	PATENT NO
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Searcher : Shears 571-272-2528

09/853367

EP 1385554      A2 Based on      WO 2002092131  
BR 2002009562    A    Based on      WO 2002092131

PRIORITY APPLN. INFO: US 2001-853367      20010511

AN 2003-067844 [06]      WPIDS

AB WO 200292131 A UPAB: 20030124

NOVELTY - An immunogenic conjugate molecule comprise **hyaluronic** acid covalently bound to an immunological polypeptide **carrier**.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are included for the following:

(1) A pharmaceutical composition (C1) comprising the conjugate and a **carrier**;

(2) Preparing the low molecular weight **hyaluronic** acid-polypeptide conjugate molecule by covalently linking low molecular weight **hyaluronic** acid fragments to the immunological polypeptide, such that at least 50% of the low molecular weight **hyaluronic** acid fragments have a **glucuronic** acid and/or an unsaturated **glucuronic** acid residue at the nonreducing terminal;

(3) A purified antibody (A) that binds to the immunogenic conjugate molecule;

(4) A pharmaceutical composition (C2) for treating or inhibiting group A streptococcal or group C streptococcal infection comprising an antibody elicited by (C1), (A), or an antibody elicited by low molecular weight **hyaluronic** acid conjugated to a liposome;

(5) A vaccine that elicits effective levels of anti-low molecular weight **hyaluronic** acid antibodies in humans comprising the immunogenic conjugate having a molecular weight of at most 400 Kd - at least 600 daltons; and

(6) A diagnostic immunoassay kit for detecting the infection by streptococci comprising (A).

ACTIVITY - Antibacterial; Immunostimulant.

MECHANISM OF ACTION - Bacterial **hyaluronic** acid specific antibody response inducer.

USE - For treating or inhibiting group A streptococcal or group C streptococcal infection; for eliciting an antibody response; for inhibiting progression of infection by bacteria containing **hyaluronic** acid in a mammal (preferably a human); and in the diagnosis of the infection and disease caused by group A streptococci or group C streptococci (all claimed)

ADVANTAGE - The conjugate is immunogenic and elicits antibodies that bind an epitope comprising glucuronic acid or unsaturated glucuronic acid as the nonreducing terminal sugar of the low molecular weight **hyaluronic** acid, in capsular **hyaluronic** acid present in bacteria (preferably group A or group C streptococcal).

Dwg.0/15

L10 ANSWER 6 OF 33      WPIDS      COPYRIGHT 2004 THOMSON DERWENT on STN

ACCESSION NUMBER:      2002-608216 [65]      WPIDS

DOC. NO. CPI:      C2002-171819

TITLE:      Microspheres for administration of pharmaceutical formulations, comprises hyaluronan functionalized with cross-linker at **glucuronic** acid

09/853367

DERWENT CLASS: sites of hyaluronan, which is further cross-linked.  
INVENTOR(S): A11 A96 B07 D21 E19  
PATENT ASSIGNEE(S): DEHAZYA, P; LU, C  
COUNTRY COUNT: (CLEA-N) CLEAR SOLUTIONS BIOTECH INC  
PATENT INFORMATION: 97

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 2002041877	A1	20020530	(200265)*	EN	40
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC					
MW MZ NL OA PT SD SE SL SZ TR TZ UG ZW					
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ					
DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP					
KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ					
NO NZ PH PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG					
US UZ VN YU ZA ZW					
AU 2002039697	A	20020603	(200265)		
US 2003096734	A1	20030522	(200336)		

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2002041877	A1	WO 2001-US50183	20011024
AU 2002039697	A	AU 2002-39697	20011024
US 2003096734	A1 Cont of	US 2000-695445	20001024
		US 2002-310629	20021205

FILING DETAILS:

PATENT NO	KIND	PATENT NO
AU 2002039697	A Based on	WO 2002041877

PRIORITY APPLN. INFO: US 2000-695445 20001024; US  
2002-310629 20021205

AN 2002-608216 [65] WPIDS

AB WO 200241877 A UPAB: 20021010

NOVELTY - Microsphere comprises hyaluronan functionalized with a cross-linker at **glucuronic** acid sites of the hyaluronan. The derivatized hyaluronan is cross-linked intramolecularly and intermolecularly.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for:

(1) formation of functionalized **hyaluronic** acid microsphere which involves mixing **hyaluronic** acid and a dihydrazide with a cross-linking activator in an aqueous solution, followed by adding a non-water miscible liquid and an emulsifying agent to form an oil-in-water-type emulsion, and subsequently lowering the pH of the emulsion to allow intramolecular and intermolecular cross-linking to occur;

(2) pharmaceutical or cosmetic formulation comprising a pharmacologically effective amount of the microsphere and an acceptable **carrier**, excipient, or diluent; and

(3) method of administering the microsphere to human or animal

which involves administering pharmacologically effective amount of the pharmaceutical or cosmetic formulation.

USE - For administering pharmaceutical or cosmetic formulation to animals, humans (claimed), used as **carriers** of releasable biologically active substances having curative or therapeutic value for humans, animals, such as therapeutic drugs e.g. anti-inflammatory agents, anti-pyretic agents, steroidal and non-steroidal drugs for anti-inflammatory use, hormones, growth factors, contraceptive agents, antivirals, anti-bacterials, anti-fungals, analgesics, hypnotics, sedatives, tranquilizers, anti-convulsants, muscle relaxants, local anesthetics, antispasmodics, antiulcer drugs, peptidic agonists, sympathiomimetic agents, cardiovascular agents, anti-tumor agents, oligonucleotides and their analogues, e.g. ibuprofen, naproxen, ketoprofen and indomethacin, naturally occurring peptides, non-naturally occurring synthetic polypeptides or their isosteres, such as small peptide hormones or hormone analogues and protease inhibitors, spermicides, anti-bacterials, antivirals, anti-fungals and anti-proliferatives such as fluorodeoxyuracil and adriamycin.

ADVANTAGE - Hyaluronan is biocompatible, non-immunogenic, subject to natural degradation by enzymes in the body and possess number of functional groups such as OH, COOH and CH<sub>2</sub>OH. The microsphere may be directly labeled for in vivo imaging purposes such as CAT, PET and MRI scanning. Materials incorporated into the microspheres can be subjected to sustained release by chemicals, enzymatic and physical erosion of the microsphere and/or the covalent **hyaluronate**-drug linkage over a period of time, providing improved therapeutic benefits of the compounds. Sustained release is particularly useful with anti-inflammatories, anti-infectives, spermicidal and anti-tumor agents.

DESCRIPTION OF DRAWING(S) - The figure shows the size distribution of microsphere suspended in 100 ml of isopropanol. Dwg. 3A/4

L10 ANSWER 7 OF 33 WPIDS COPYRIGHT 2004 THOMSON DERWENT on STN  
 ACCESSION NUMBER: 2002-657363 [70] WPIDS  
 DOC. NO. CPI: C2002-184360  
 TITLE: Biodegradable block structure copolymers from a saccharide and a cyanoacrylate, useful as **carriers** for pharmaceuticals, veterinary products, agroalimentary products, and cosmetics.  
 DERWENT CLASS: A11 A14 A96 B07 C07 D13 D21  
 INVENTOR(S): CHAUVIERRE, C; COUVREUR, P; LABARRE, D; VAUTHIER, C  
 PATENT ASSIGNEE(S): (CNRS) CNRS CENT NAT RECH SCI; (CHAU-I) CHAUVIERRE C; (COUV-I) COUVREUR P; (LABA-I) LABARRE D; (VAUT-I) VAUTHIER C  
 COUNTRY COUNT: 100  
 PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 2002039979	A1	20020523	(200270)*	FR	46
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC					
MW MZ NL OA PT SD SE SL SZ TR TZ UG ZM ZW					
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ					
DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP					

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KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ  
NO NZ OM PH PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA  
UG US UZ VN YU ZA ZM ZW  
AU 2002020793 A 20020527 (200270)  
FR 2816949 A1 20020524 (200270)  
EP 1355627 A1 20031029 (200379) FR  
R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK  
NL PT RO SE SI TR  
US 2004028635 A1 20040212 (200412)

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2002039979	A1	WO 2001-FR3619	20011116
AU 2002020793	A	AU 2002-20793	20011116
FR 2816949	A1	FR 2000-14900	20001117
EP 1355627	A1	EP 2001-996362	20011116
		WO 2001-FR3619	20011116
US 2004028635	A1	WO 2001-FR3619	20011116
		US 2003-416840	20030515

FILING DETAILS:

PATENT NO	KIND	PATENT NO
AU 2002020793	A Based on	WO 2002039979
EP 1355627	A1 Based on	WO 2002039979

PRIORITY APPLN. INFO: FR 2000-14900 20001117

AN 2002-657363 [70] WPIDS

AB WO 200239979 A UPAB: 20021031

NOVELTY - Block structure copolymers having a saccharide hydrophilic segment and a biodegradable segment of formula (I), the saccharide segment being attached at one of its extremities to a single segment (I) or be each of its two extremities to a segment of formula (I), the two hydrophobic segments being the same or different.

DETAILED DESCRIPTION - Block structure copolymers having a saccharide hydrophilic segment and a biodegradable segment of formula (I),

X = CN or CONHR;

Y = COOR' or CONHR;

n = undefined; and

R, R' and R = H, 1-20C alkyl or alkoxy, amino acid, mono- or polyhydroxylated acid, or 5 - 12C aryl or heteroaryl.

The saccharide segment being attached at one of its extremities to a single segment (I) or be each of its two extremities to a segment of formula (I), the two hydrophobic segments being the same or different.

An INDEPENDENT CLAIM is also included for

(1) cover particles of the block copolymers, especially those having a particle size between 1 nm and 1 mm, and such particles that further contain a pharmaceutical, agroalimentary, cosmetic or veterinary active ingredient; and

(2) process of radical route polymerization of (II) with a poly- or oligo-saccharide.

Searcher : Shears 571-272-2528

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USE - The biodegradable block is used as **carriers** for pharmaceuticals, veterinary products, agroalimentary products, and cosmetics.  
Dwg.0/3

L10 ANSWER 8 OF 33 WPIDS COPYRIGHT 2004 THOMSON DERWENT on STN  
ACCESSION NUMBER: 2003-479370 [45] WPIDS  
CROSS REFERENCE: 1998-052002 [05]  
DOC. NO. CPI: C2003-127986  
TITLE: Composition for treating skin disorders, comprises acid protease and acidic buffer comprising an acid that reversibly disassociates hydrogen ions and that has buffering capacity at pH values below that of the skin surface.  
DERWENT CLASS: A96 B04 D16 D21  
INVENTOR(S): BISHOP, M; GILLIS, G; NORTON, S J  
PATENT ASSIGNEE(S): (BISH-I) BISHOP M; (GILL-I) GILLIS G; (NORT-I) NORTON S J; (ACTI-N) ACTIM ORGANICS INC  
COUNTRY COUNT: 1  
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
US 2002102285	A1	20020801	(200345)*		16
US 6656701	B2	20031202	(200404)		

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
US 2002102285	A1 CIP of	US 1999-354687	19990716
		US 2002-59790	20020129
US 6656701	B2 Div ex	US 1996-664056	19960613
	CIP of	US 1999-354687	19990716
		US 2002-59790	20020129

FILING DETAILS:

PATENT NO	KIND	PATENT NO
US 6656701	B2 Div ex	US 5976556
	CIP of	US 6569437

PRIORITY APPLN. INFO: US 2002-59790 20020129; US  
1999-354687 19990716; US  
1996-664056 19960613

AN 2003-479370 [45] WPIDS

CR 1998-052002 [05]

AB US2002102285 A UPAB: 20040226

NOVELTY - A composition (I) comprises:

(i) an acid protease that is enzymatically active below pH 5.5 and is inactive at or above pH 5.5; and

(ii) an acidic buffer comprising an acid that reversibly disassociates hydrogen ions and that have a buffering capacity at pH values below that of skin surface i.e., approximately pH 5.5 which, when applied to skin, temporarily lowers the surface pH of skin to

Searcher : Shears 571-272-2528

below pH 5.5.

DETAILED DESCRIPTION - A new composition (I) comprises:

- (i) an acid protease which is enzymatically active below about pH 5.5 and which is significantly inactive at or about pH 5.5; and
- (ii) an acidic buffer comprising an acidic buffering component that can reversibly disassociate hydrogen ions and have buffering capacity at pH values below that of the surface of the skin i.e., approximately pH 5.5 which, when applied to skin, temporarily lowers the surface pH of the skin to below about pH 5.5.

The acidic buffer is subjected to neutralization by natural epidermal processes, so that the surface pH of the skin, to which the acidic buffer was applied, returns to about pH 5.5.

An INDEPENDENT CLAIM is also included for a method comprising an acid protease which is enzymatically active below about pH 5.5 and which is significantly inactive at or about pH 5.5, and an acidic buffer comprising at least one acidic buffering component that can reversibly disassociate hydrogen ions and have buffering capacity at pH values below that of the surface of the skin i.e., approximately pH 5.5 which, when applied to skin, temporarily lowers the surface pH of the skin to below about pH 5.5, where the acidic buffer is subjected to neutralization by natural epidermal processes, so that the surface pH of the skin, to which such acidic buffer was applied, returns to about pH 5.5.

ACTIVITY - Keratolytic; Antipsoriatic; Dermatological; Antipruritic; Dermatological; Virucide; Antiinflammatory; Cosmetic; Antiseborrheic.

MECHANISM OF ACTION - Epidermal exfoliation enhancer; Epidermal skin renewal enhancer; Effects of skin atrophy regulator. The composition was tested at differing concentrations of the acid protease pepsin, 1:15000 NF and the acidic buffer lactic acid on individual human volar forearms for the enhancement of skin exfoliation and cell renewal. Twenty subjects between the ages of 30 and 60 years were selected and were required to refrain from using any products on their volar forearm, except those supplied in conjunction with the test procedure for 5 days before and during the test period. Each volar forearm of each subject was patched with adhesive bandages, to which had been applied 1 - 2 gm/cm<sup>2</sup> of 5 % ultra-pure dansyl chloride milled into petrolatum. Three of the bandages on each forearm were used as test sites and the remaining one was used as a control. The four sites on each forearm of each subject were covered with the dansyl chloride-loaded bandages and were left undisturbed for 24 hours. At the end of the 24 hour period, the bandages were removed, the sites washed and staining of the sites by dansyl chloride was confirmed by viewing with a long wave ultra-violet (UV) light source to detect fluorescence by the dansyl chloride. The six non-control dansyl chloride stained test sites on each subject received twice daily topical applications of 1 - 2 ml/cm<sup>2</sup> of the test composition. Upon applications, the test composition was rubbed into the skin at the test sites until the sites were no longer wet. After the dansyl chloride staining was verified, the test sites and the control sites were left uncovered and were handled in the same manner except that the test sites received the test applications and the control sites did not receive any test composition. Exfoliation/keratolysis of the stratum corneum was determined by visualizing the dansyl chloride stains daily under a long wave UV light source to measure stain removal. The percent

increase in exfoliation/keratolysis and accompanying cell renewal of the stratum corneum was calculated. The results showed that the acidic buffer lactic acid had some positive keratolytic/cell renewal effects alone. These positive keratolytic/cell renewal effects were significantly enhanced in the presence of the acid protease pepsin.

USE - (I) is useful for treating or preventing abnormal biological conditions, diseases or disorders such as skin atrophy, i.e., the thinning and/or general degradation of the dermis often characterized by a decrease in collagen and/or elastin as well as decreased number, size and doubling potential of fibroblast cells and other maladies such as dry skin, severe dry skin, dandruff, acne, keratoses, psoriasis, eczema skin flakiness, pruritis, age spots, lentigines, melasmas, wrinkles, warts, blemished skin, hyperpigmented skin, hyperkeratotic skin, inflammatory dermatoses, age-related skin changes and skin in need of skin cleansers. (I) is useful for improving the texture or appearance of the skin, and/or for enhancing epidermal exfoliation and/or for enhancing epidermal skin renewal, and for regulating the effects of skin atrophy.

ADVANTAGE - Control of the time period required for the pH of the surface of the skin to return to a pH of about 5.5 after topical application of (I) allows for control of the activity of the protease enzyme. This control of proteolytic activity overcomes the drawbacks and complications found in prior art, such as itching, burning, blistering etc., caused by broad pH spectrum proteolytic enzymes. To avoid the drawbacks and complications found in prior art, the period of time should not exceed about 4 hours, preferably between about 30 minutes to about 1 hour for any individual application of (I).

Dwg.0/3

L10 ANSWER 9 OF 33 MEDLINE on STN  
 ACCESSION NUMBER: 2002146076 MEDLINE  
 DOCUMENT NUMBER: PubMed ID: 11878809  
 TITLE: Importance of hyaluronan length in a  
 hyaladherin-based assay for hyaluronan.  
 AUTHOR: Courel Marie-Noelle; Maingonnat Catherine;  
 Tranchepain Frederic; Deschrevel Brigitte; Vincent  
 Jean-Claude; Bertrand Philippe; Delpech Bertrand  
 CORPORATE SOURCE: Department of Molecular Oncology, Centre  
 Henri-Becquerel, Rue d'Amiens, Rouen 76000, France.  
 SOURCE: Analytical biochemistry, (2002 Mar 15) 302 (2)  
 285-90.  
 Journal code: 0370535. ISSN: 0003-2697.  
 PUB. COUNTRY: United States  
 DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)  
 LANGUAGE: English  
 FILE SEGMENT: Priority Journals  
 ENTRY MONTH: 200206  
 ENTRY DATE: Entered STN: 20020307  
 Last Updated on STN: 20020628  
 Entered Medline: 20020627  
 AB Specific hyaladherin-based assays have been set up to measure the  
 concentration of hyaluronan in biological fluids. Hyaluronectin  
 (HN; a hyaladherin extracted from ovine brain) binds to hyaluronan  
 (HA) that must be 10 units (HA10) or more long. It was therefore of  
 interest to determine whether HN would continue to bind to HA10 in



full-length HA since conformational changes might mask potential binding sites. We used the enzyme-linked sorbent assay (ELSA) to assay HA and hyaluronan-derived oligosaccharides, with different standard HAs, and the results were compared to results obtained with the carbazole technique. Oligosaccharide length was calculated from the ratio **glucuronic** acid/reducing N-acetylglucosamine in fractions of hyaluronidase-digested macromolecular hyaluronan prepared by chromatography; the size of the HA12 oligosaccharide was confirmed by matrix-assisted laser desorption ionization mass spectrometry. During the digestion of macromolecular HA with hyaluronidase, the binding of HN to HA first increased and then decreased as shown using the ELSA. The concentration of HA fragments of HA60 and below was overestimated when intact macromolecular HA was used as the reference for the ELSA, while the concentration of HA100 and above was underestimated when HA10 was used as the reference. The binding of HN to HA20, HA40, and HA60 saccharides was consistent with binding to multiples of HA10 sites. In conclusion, the level of HN binding is determined by the conformation of HA, which may mask binding sites. Hence, calibration HA used in the ELSA must be adapted to the size of HA to assay.

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L10 ANSWER 10 OF 33 WPIDS COPYRIGHT 2004 THOMSON DERWENT on STN  
 ACCESSION NUMBER: 2002-049237 [06] WPIDS  
 DOC. NO. CPI: C2002-013799  
 TITLE: New chondroitin synthase gene obtained from  
 Pasteurella multocida, useful as hyaluronan  
 polysaccharide substitute in medial or cosmetic  
 applications, e.g. for eye or joint applications,  
 for moisturizer or wound dressings.  
 DERWENT CLASS: B04 D16  
 INVENTOR(S): DE ANGELIS, P L; WEIGEL, J A; WEIGEL, P H; ZHOU, B  
 PATENT ASSIGNEE(S): (DANG-I) DE ANGELIS P L; (UYOK-N) UNIV OKLAHOMA  
 COUNTRY COUNT: 96  
 PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 2001080810	A2	20011101	(200206)*	EN	125
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZW					
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW					
AU 2001053805	A	20011107	(200219)		
EP 1278830	A2	20030129	(200310)	EN	
R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI TR					
EP 1282684	A2	20030212	(200312)	EN	
R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI TR					
US 2003104601	A1	20030605	(200339)		
JP 2004512013	W	20040422	(200428)		295

## APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2001080810	A2	WO 2001-US13395	20010425
AU 2001053805	A	AU 2001-53805	20010425
EP 1278830	A2	EP 2001-928880	20010425
		WO 2001-US13403	20010425
EP 1282684	A2	EP 2001-927344	20010425
		WO 2001-US13395	20010425
US 2003104601	A1 CIP of	US 1999-283402	19990401
	CIP of	US 1999-437277	19991110
	Provisional	US 2000-199538P	20000425
		US 2001-842484	20010425
JP 2004512013	W	JP 2001-577911	20010425
		WO 2001-US13395	20010425

## FILING DETAILS:

PATENT NO	KIND	PATENT NO
AU 2001053805	A Based on	WO 2001080810
EP 1278830	A2 Based on	WO 2001081544
EP 1282684	A2 Based on	WO 2001080810
US 2003104601	A1 CIP of	US 6444447
JP 2004512013	W Based on	WO 2001080810

PRIORITY APPLN. INFO: US 2000-199538P 20000425; US  
 2000-245320P 20001102; US  
 1999-283402 19990401; US  
 1999-437277 19991110; US  
 2001-842484 20010425

AN 2002-049237 [06] WPIDS

AB WO 200180810 A UPAB: 20020128

NOVELTY - A purified nucleic acid (I) comprising a coding region encoding enzymatically active chondroitin synthase, is new.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

- (1) purified nucleic acid segments having a coding region encoding enzymatically active chondroitin synthase, where the nucleic acid segment is capable of hybridizing to a fully defined sequence of 2941 (S1) base pairs, as given in the specification, with (semi)conservative amino acid changes, or is a truncated segment;
- (2) a recombinant vector selected from a plasmid, cosmid, phage, integrated cassette or virus vector, and comprises (I);
- (3) recombinant host cells transformed with a recombinant vector comprising (I) or a nucleic acid encoding chondroitin synthase, or which contains a chondroitin synthase and an epimerase and/or sulfotransferase;
- (4) purified compositions comprising an enzymatically active chondroitin synthase polypeptide, or a chondroitin polymer;
- (5) producing a chondroitin polymer in vitro or in vivo;
- (6) detecting a DNA species, comprising obtaining a DNA sample, contacting the sample with S1 or S2, hybridizing the DNA and (S1) to

form a hybridized complex, and detecting the complex;

(7) detecting a cell or a bacterial cell that expresses mRNA encoding *Pasteurella multocida* chondroitin synthase;

(8) pharmaceutical composition comprising a pre-selected pharmaceutical drug and a chondroitin polymer produced by a chondroitin synthase directly or after modification of the polymer by sulfation and/or epimerization;

(9) an isolated nucleic acid segment encoding chondroitin synthase having a nucleic acid segment sufficiently duplicative of (S1) segment to allow possession of the biological property of encoding a *Pasteurella multocida* chondroitin synthase;

(10) a recombinant host that produce chondroitin synthase;

(11) a recombinant method of producing a heterologous polypeptide in a host cell;

(12) producing a chondroitin polymer by fermentation of a cell expressing a chondroitin synthase having a defined sequence of 961 amino acids;

(13) in vitro sulfation of a chondroitin polymer;

(14) a dermatan polymer obtained by epimerizing a chondroitin polymer;

(15) a recombinantly produced unsulfated chondroitin polysaccharide;

(16) a polysaccharide comprising alternating Beta 1,4-linked GalNAc and Beta 1,3-linked BlcUA in a 1:1 ratio of the polysaccharide;

(17) a nucleic acid segment corresponding to residues 1-704, 45-704, or 75-704 of (S1) and which encodes an enzymatically active chondroitin synthase; and

(18) a purified composition comprising a chondroitin synthase polypeptide, a chondroitin polymer.

USE - Chondroitin polysaccharide may be used as hyaluronan polysaccharide substitute in medial or cosmetic applications, e.g. for eye or joint applications, for moisturizer or wound dressings. The enzyme may be used in covalently coupling specific drugs, protein or **toxins** to the structurally modified chondroitin for general or targeted drug delivery or radiological procedures; covalently cross linking the **hyaluronic** acid itself or to other supports to achieve a gel or other three dimensional biomaterial with stronger physical properties, and covalently linking **hyaluronic** acid to a surface to create a biocompatible film or monolayer.

Dwg.0/10

L10 ANSWER 11 OF 33	WPIDS COPYRIGHT 2004 THOMSON DERWENT on STN
ACCESSION NUMBER:	2001-308366 [32] WPIDS
DOC. NO. CPI:	C2001-095258
TITLE:	Sustained release microspheres for administering drugs, comprises a <b>carrier</b> protein, a water soluble polymer, a polyanionic polysaccharide and divalent calcium or magnesium.
DERWENT CLASS:	A96 B04
INVENTOR(S):	BLIZZARD, C D; BROWN, L R; RASHBA-STEP, J; RISKE, F J; SCOTT, T L
PATENT ASSIGNEE(S):	(EPIC-N) EPIC THERAPEUTICS INC; (BLIZ-I) BLIZZARD C D; (BROW-I) BROWN L R; (RASH-I) RASHBA-STEP J; (RISK-I) RISKE F J; (SCOT-I) SCOTT T L

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COUNTRY COUNT: 95  
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 2001028524	A1	20010426	(200132)*	EN	71
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC					
MW MZ NL OA PT SD SE SL SZ TZ UG ZW					
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE					
DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG					
KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ					
PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN					
YU ZA ZW					
AU 2001011980	A	20010430	(200148)		
EP 1223917	A1	20020724	(200256)	EN	
R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK					
NL PT RO SE SI					
US 6458387	B1	20021001	(200268)		
US 2003059474	A1	20030327	(200325)		

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2001028524	A1	WO 2000-US28200	20001012
AU 2001011980	A	AU 2001-11980	20001012
EP 1223917	A1	EP 2000-973477	20001012
		WO 2000-US28200	20001012
US 6458387	B1	US 1999-420361	19991018
US 2003059474	A1 Cont of	US 1999-420361	19991018
		US 2002-245776	20020917

FILING DETAILS:

PATENT NO	KIND	PATENT NO
AU 2001011980	A Based on	WO 2001028524
EP 1223917	A1 Based on	WO 2001028524
US 2003059474	A1 Cont of	US 6458387

PRIORITY APPLN. INFO: US 1999-420361 19991018; US  
2002-245776 20020917

AN 2001-308366 [32] WPIDS

AB WO 200128524 A UPAB: 20010611

NOVELTY - Sustained release microspheres comprising a **carrier** protein (I), a water soluble polymer (II), a first complexing agent (III) that is a polyanionic polysaccharide, and a second complexing agent (IV) comprising a divalent metal cation comprising calcium or magnesium, are new.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

- (1) a syringe containing a single dose of the microspheres, including a needle having a bore size of 14-30 gauge; and
- (2) forming a microsphere comprising:
  - (a) forming an aqueous mixture of (I), (II), (III) and (IV);
  - (b) allowing the microspheres to form in the aqueous mixture;

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and

(c) stabilizing the microspheres, preferably by contacting the microspheres with a crosslinking agent and/or exposing the microspheres to an energy source, preferably heat.

USE - The microspheres are useful for administration of drugs, for a wide variety of separations, diagnostic, therapeutic, industrial, commercial and research purposes e.g. in vivo diagnosis (e.g. where the microspheres can include a macromolecule such as an immunoglobulins or cell receptor labeled with a detectable label). They can be labeled for diagnosis of proliferative disorders such as cancer, or can be used for purification of molecules from complex mixtures, as reagents for detection or quantification of specific molecules or for production of molecules such as antibodies. They can also be used as adjuvants for vaccine production by injection into e.g. mice or rabbits to trigger enhanced immune responses. The microspheres can also be used in cleaning formulations such as enzyme particles for addition to detergents, cosmetics such as the formation of collagen particles to be suspended in a lotion or cream, ink or paint.

ADVANTAGE - Prior art micro particles or beads were difficult and expensive to produce and had a wide size distribution, often lacked uniformity and failed to exhibit long term release kinetics when the concentration of active ingredients was high. The new microspheres are of a dimension which permits the delivery using a needleless syringe, eliminating disposal problems inherent to needles which must be disposed as biohazard waste products. The microspheres also have qualities suitable for delivery by other parenteral and non-parenteral routes.  
Dwg.0/13

L10 ANSWER 12 OF 33 WPIDS COPYRIGHT 2004 THOMSON DERWENT on STN  
 ACCESSION NUMBER: 2002-262519 [31] WPIDS  
 DOC. NO. NON-CPI: N2002-204055  
 DOC. NO. CPI: C2002-078054  
 TITLE: Forming modified **hyaluronic** acid gel for use as a medical, comprises introducing a substituent in a hydroxyl group of **hyaluronic** acid, where the gel is slightly soluble in neutral aqueous solution.  
 DERWENT CLASS: B04 B07 P34  
 PATENT ASSIGNEE(S): (ELED) DENKI KAGAKU KOGYO KK  
 COUNTRY COUNT: 1  
 PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
JP 2001329002	A	20011127	(200231)*		9

# APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
JP 2001329002	A	JP 2000-154943	20000525

PRIORITY APPLN. INFO: JP 2000-154943 20000525

Searcher : Shears 571-272-2528

09/853367

AN 2002-262519 [31] WPIDS  
AB JP2001329002 A UPAB: 20020516

NOVELTY - A modified **hyaluronic** acid gel is formed by introducing a substituent in a hydroxyl group of **hyaluronic** acid ( beta -D-N-acetyl glucosamine and beta -D-**glucuronic** acid), where the gel is slightly soluble in neutral aqueous solution.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

(1) manufacturing modified **hyaluronic** acid gel, involving adjusting the pH of an aqueous solution containing modified **hyaluronic** acid to 3.5, freezing the solution and performing at least a thawing process; and

(2) a medical material comprising a gel containing the modified **hyaluronic** acid gel having a dissolution rate of 25 % or less/day at 25 deg. C and a branching degree of 0.5 or more.

USE - The gel is used for formation of medical material, such as adhesion prevention material, surgical dressing, a drug delivery system or a **carrier** for drugs (claimed).

ADVANTAGE - The modified **hyaluronic** acid gel is water insoluble. The gel inhibits postoperative adhesion by improving the residence time on the injury surface. The gel is highly safe for a human body and is bio-compatible without using a cross-linking agent.  
Dwg.0/0

L10 ANSWER 13 OF 33 WPIDS COPYRIGHT 2004 THOMSON DERWENT on STN  
ACCESSION NUMBER: 2001-617986 [72] WPIDS  
DOC. NO. CPI: C2001-185046  
TITLE: Composition useful for filling out tissue, such as for cosmetic purposes or for treatment of wounds, is biocompatible and includes, dextran beads coated with **hyaluronic** acid.  
DERWENT CLASS: B04 D21  
INVENTOR(S): LAESCHKE, K  
PATENT ASSIGNEE(S): (COSM-N) COSMEDICA CONSULTING GMBH  
COUNTRY COUNT: 1  
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
DE 19954357	A1	20010726	(200172) *		6
DE 19954357	C2	20020905	(200260)		

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
DE 19954357	A1	DE 1999-1054357	19991111
DE 19954357	C2	DE 1999-1054357	19991111

PRIORITY APPLN. INFO: DE 1999-19954357 19991111

AN 2001-617986 [72] WPIDS

AB DE 19954357 A UPAB: 20011206

NOVELTY - Composition comprising:

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- (a) a high molecular weight heteropolysaccharide; and
- (b) a crosslinked polysaccharide in bead form is new.

ACTIVITY - Vulnerary.

MECHANISM OF ACTION - None given.

USE - The composition is especially useful for filling out tissue and can be used for cosmetic purposes or medical purposes, including wound healing.

ADVANTAGE - The composition is biocompatible, acts to fill out tissue for long periods of time and does not cause side effects, e.g., inflammatory reactions.

Dwg.0/0

L10 ANSWER 14 OF 33 MEDLINE on STN  
ACCESSION NUMBER: 2001372957 MEDLINE  
DOCUMENT NUMBER: PubMed ID: 11429155  
TITLE: The use of fibrin beads for tissue engineering and subsequent transplantation.  
AUTHOR: Perka C; Arnold U; Spitzer R S; Lindenhayn K  
CORPORATE SOURCE: Department of Orthopedics, Charite University Hospital, Humboldt University of Berlin, Germany.. carsten.perka@charite.de  
SOURCE: Tissue engineering, (2001 Jun) 7 (3) 359-61. Journal code: 9505538. ISSN: 1076-3279.  
PUB. COUNTRY: United States  
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)  
LANGUAGE: English  
FILE SEGMENT: Priority Journals  
ENTRY MONTH: 200110  
ENTRY DATE: Entered STN: 20011029  
Last Updated on STN: 20011029  
Entered Medline: 20011025  
AB New biological technologies such as tissue engineering procedures require the transplantation of functionally active cells within supportive **carrier** matrices. This paper describes a sequential culture procedure for different types of cells. The technique includes the initial preparation of a mixed alginate-fibrin vehicle that guaranteed an initial cell proliferation and differentiation to establish a stable matrix structure, and the subsequent removal of the alginate component prior to transplantation to circumvent the problem of missing bioresorbability. The resulting biodegradable **carrier** is mechanically stable and promotes further tissue maturation. Chondrocytes, periosteal-derived cells, as well as nucleus pulposus cells were entrapped in fibrin-alginate beads and in fibrin beads. The results indicate a promising technical approach to create stable transplants for reconstructive surgery of cartilage and bone.  
  
L10 ANSWER 15 OF 33 WPIDS COPYRIGHT 2004 THOMSON DERWENT on STN  
ACCESSION NUMBER: 2000-465614 [40] WPIDS  
DOC. NO. CPI: C2000-140180  
TITLE: Composition useful for cosmetic or therapeutic treatment of skin or mucosa, e.g. where damaged by light, containing enzymatic fragments of **hyaluronic acid**.  
DERWENT CLASS: B04 C03 D16 D21  
INVENTOR(S): FRIES, G; HUSCHKA, C; KOEGST, D; MUELLER, P;

Searcher : Shears 571-272-2528

09/853367

PATENT ASSIGNEE(S): NEUBERT, R; OZEGOWSKI, J; WOHLRAB, W  
 (ESPA-N) ESPARMA GMBH; (ANGE-N) INST ANGEWANDTE  
 DERMATOPHARMAZIE; (KNOE-N) KNOELL-INST  
 NATURSTOFF-FORSCH EV HANS; (NEUB-I) NEUBERT R;  
 (UYJE) UNIV SCHILLER JENA; (WOHL-I) WOHLRAB W;  
 (UYHA-N) UNIV MARTIN LUTHER HALLE INST ANGEWANDTE  
 COUNTRY COUNT: 91  
 PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 2000038647	A1	20000706	(200040)*	GE	37
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL OA PT SD SE SL SZ TZ UG ZW					
W: AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW					
AU 2000021018	A	20000731	(200050)		
EP 1140006	A1	20011010	(200167)	GE	
R: AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE					
JP 2002533376	W	20021008	(200281)		33
EP 1140006	B1	20030723	(200356)	GE	
R: AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE					
DE 59906391	G	20030828	(200357)		
US 6689349	B1	20040210	(200413)		
ES 2203238	T3	20040401	(200425)		

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2000038647	A1	WO 1999-EP10336	19991222
AU 2000021018	A	AU 2000-21018	19991222
EP 1140006	A1	EP 1999-965544	19991222
		WO 1999-EP10336	19991222
JP 2002533376	W	WO 1999-EP10336	19991222
		JP 2000-590601	19991222
EP 1140006	B1	EP 1999-965544	19991222
		WO 1999-EP10336	19991222
DE 59906391	G	DE 1999-506391	19991222
		EP 1999-965544	19991222
		WO 1999-EP10336	19991222
US 6689349	B1	WO 1999-EP10336	19991222
		US 2001-868955	20010910
ES 2203238	T3	EP 1999-965544	19991222

FILING DETAILS:

PATENT NO	KIND	PATENT NO
AU 2000021018	A Based on	WO 2000038647
EP 1140006	A1 Based on	WO 2000038647
JP 2002533376	W Based on	WO 2000038647
EP 1140006	B1 Based on	WO 2000038647
DE 59906391	G Based on	EP 1140006

Searcher : Shears 571-272-2528



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	Based on	WO 2000038647
US 6689349	B1 Based on	WO 2000038647
ES 2203238	T3 Based on	EP 1140006

PRIORITY APPLN. INFO: DE 1998-19860544 19981223

AN 2000-465614 [40] WPIDS

AB WO 200038647 A UPAB: 20000823

NOVELTY - Composition (A) for protecting, maintaining or restoring the normal function and structure of human or animal skin and/or mucosa, and for preventing environmentally induced (e.g. by ultraviolet light) damage to the skin comprises a mixture of enzymatic fragments (I) of **hyaluronic acid** (HA) and optionally one or more of **carrier**, hydrophilic and/or lipophilic active ingredients and/or auxiliaries.

ACTIVITY - Antiinflammatory; dermatological; antiallergic; immunosuppressant.

MECHANISM OF ACTION - Antioxidants, free-radical scavengers and inhibit the formation of injurious photochemically produced products. HaCaT keratinocytes were pretreated for 1 hour with (I), then exposed to ultraviolet (UV) B radiation at a dose (120 mJ/cm<sup>2</sup>) that kills 50-60% of control cells. After 24 hours, viability was determined and about 90% of (I)-treated cells were still alive.

USE - (A) are used, in human or veterinary medicine, to treat (including cosmetic treatment) and prevent skin disorders such as those caused by environmental factors (e.g. UV light), dry skin, aging of skin and photosensitivity (where manifested as erythema, inflammation, allergy or autoimmune reaction).

ADVANTAGE - (A) have excellent biocompatibility, so are suitable for long-term application without side effects, and retain the moisturizing activity of known HA formulations.  
Dwg.0/11

L10 ANSWER 16 OF 33 WPIDS COPYRIGHT 2004 THOMSON DERWENT on STN

ACCESSION NUMBER: 2000-681105 [67] WPIDS

DOC. NO. CPI: C2000-207282

TITLE: Compositions to deliver compounds into cells e.g. to treat rheumatoid arthritis, comprise organic halide, targeting ligand and nuclear localization sequence in combination with compound and **carrier**.

DERWENT CLASS: A96 B07 D16

INVENTOR(S): MCCREERY, T; SADEWASSER, D A; UNGER, E C

PATENT ASSIGNEE(S): (IMAR-N) IMARX PHARM CORP

COUNTRY COUNT: 25

PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
EP 1046394	A2	20001025	(200067)*	EN	78
R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI					

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
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Searcher : Shears 571-272-2528

EP 1046394

A2

EP 2000-303249

20000418

PRIORITY APPLN. INFO: US 1999-294623 19990419

AN 2000-681105 [67] WPIDS

AB EP 1046394 A UPAB: 20001223

NOVELTY - Compositions for delivering compounds into cells comprise: an organic halide; a targeting ligand; and a nuclear localization sequence in combination with the compound to be delivered.

ACTIVITY - Immunoregulatory; anti-inflammatory; anti-arthritis.

USE - The compositions are used to deliver compounds into cells (claimed), particularly for the treatment of autoimmune disorders and inflammatory conditions such as rheumatoid arthritis. They may also be used to deliver pharmaceuticals, drugs, diagnostic agents, synthetic organic molecules, peptides, proteins, vitamins, steroids, genetic materials and other bioactive agents e.g. mitotic inhibitors (vinca alkaloids), radiopharmaceuticals (radioactive iodine, phosphorus and cobalt isotopes), hormones (progestins, estrogens, anti-estrogens), anthelmintics, antimalarials, antituberculars, biologicals (immune sera, antitoxins, antivenoms), rabies prophylactic products, bacterial vaccines, viral vaccines, aminoglycosides, respiratory products (xanthine derivatives, theophylline, aminophylline), thyroid therapeutics (iodine salts, antithyroid agents), cardiovascular products (chelating agents, mercurial diuretics, cardiac glycosides), glucagons, blood products (parenteral iron, hemin, hematoporphyrins and derivatives), targeting ligands (peptides, antibodies, antibody fragments), biological response modifiers (muramyl dipeptide, muramyl tripeptide, microbial cell wall components, lymphokines - bacterial endotoxin e.g. lipopolysaccharide and macrophage activation factor), subunits of bacteria (Mycobacteria, Comebacteria), synthetic dipeptides (N-acetyl-muramyl-L-alanyl-D-isoglutamine), antifungals (ketoconazole, nystatin, griseofulvin, flucytosine, miconazole, amphotericin B), **toxins** (ricin), immunosuppressants (cyclosporins), antibiotics (beta-lactam, sulfazecin), hormones (growth hormone, melanocyte-stimulating hormone, estradiol, beclomethasone dipropionate, betamethasone, betamethasone acetate, betamethasone sodium phosphate, betamethasone disodium phosphate, cortisone acetate, dexamethasone, dexamethasone acetate, dexamethasone sodium phosphate, flunisolide, hydrocortisone, hydrocortisone acetate, hydrocortisone cypionate, hydrocortisone sodium phosphate, hydrocortisone sodium succinate, methylprednisolone, methylprednisolone acetate, methylprednisolone sodium succinate, paramethasone acetate, prednisolone acetate, prednisolone sodium phosphate, prednisolone tebutate, prednisone, triamcinolone, triamcinolone acetonide, triamcinolone diacetate, triamcinolone hexacetonide, fluorocortisone acetate, oxytocin, vasopressin and their derivatives), vitamins (cyanocobalamin neonic acid), retinoids and their derivatives (retinal palmitate, alpha-tocopheryl), peptides and enzymes (manganese superoxide dismutase, alkaline phosphatases), anti-allergens (amelexanox), anticoagulants (phenprocoumon, heparin), tissue plasminogen activators, streptokinase and urokinase), circulatory drugs (propranolol), metabolic potentiators (glutathione), antibiotics (p-aminosalicylic acid, isoniazid, capreomycin sulfate, cycloserine, ethambutol hydrochloride, ethionamide, pyrazinamide, rifampicin, streptomycin

sulfate dapsone, chloramphenicol, neomycin, ceflacor, cefadroxil, cephalixin, cephadrine erythromycin, clindamycin, lincomycin, amoxicillin, ampicillin, bacampicillin, carbenicillin, dicloxicillin, cyclacillin, picloxicillin, hetacillin, methicillin, nafcillin, oxacillin, penicillin (G and V), ticarcillin, rifampin, tetracycline), antivirals (acyclovir, ddI, foscarnet, zidovudine, ribavirin, vidarabine monohydrate), antianginals (diltiazem, nifedipine, verapamil, erythritol tetranitrate, isosorbide dinitrate, nitroglycerin (glyceryl trinitrate), pentaerythritol tetranitrate, anti-inflammatories (diflusal, ibuprofen, indomethacin, meclofenamate, mefenamic acid, naproxen, oxyphenbutazone, phenylbutazone, piroxicam, sulindac, tolmetin, aspirin, salicylates), antiprotozoans (chloroquine, hydroxychloroquine, metronidazole, quinine, meglumine antimonate), antirheumatics (penicillamine), narcotics (paregoric), opiates (codeine, heroin, methadone, morphine, opium), cardiac glycosides (deslanoside, digitoxin, digoxin, digitalin, digitalis), neuromuscular blockers (atracurium mesylate, gallamine triethiodide, hexafluorenum bromide, metocurine iodide, pancurium bromide, succinylcholine chloride (suxamethonium chloride), tubocurarine chloride, vencuronium bromide), sedatives (amobarbital, amobarbital sodium, aprobarbital, butabarbital sodium, chloral hydrate, ethchlorvynol, ethinamate, flurazepam hydrochloride, glutethimide, methotrimeprazine hydrochloride, methypylon, midazolam hydrochloride, paraldehyde, pentobarbital, pentobarbital sodium, secobarbital sodium, thiopental sodium), antineoplastics (methotrexate, fluorouracil, adriamycin, mitomycin, ansamitomycin, bleomycin, cysteine arabinoside, arabinosyl adenine, mercaptopolylysine, vincristine, busulfan, chlorambucil, azidothymidine, melphalan (e.g. PAM, L-PAM or phenylalanine mustard), mercaptopurine, mitotane, procarbazine hydrochloride, dactinomycin (actinomycin D), daunorubicin hydrochloride, dosorubicin hydrochloride, Taxol (RTM: paclitaxel), plicamycin (mithramycin), aminogluthethimide, estramustine phosphate sodium, flutamide, leuprolide acetate, megestrol acetate, tamoxifen citrate, testolactone, trilostane, amsacrine (m-AMSA), asparaginase, etoposide (VP-16), interferon alpha -2a, interferon alpha -2b, teniposide (VM-26), vinblastine sulfate (VLB), vincristine sulfate, hydroxyurea, procarbazine or dacarbazine).

ADVANTAGE - The compositions provide improved delivery of compositions including drugs and genetic materials into cells. They provide for specific targeting and delivery of compounds to particular cells and increased targeting to the nuclei of targeted cells. They also allow delivery to cell lines that would be otherwise resistant to intracellular delivery and gene expression using other conventional means.

DESCRIPTION OF DRAWING(S) - Schematic representation of a targeted composition.

targeted composition 1  
lipid coating 2  
lipids 2A  
halocarbon gas or liquid 3  
genetic material 4  
targeting ligand 5  
lipid head group 6  
tether 7

tether 7A  
 nuclear localization sequence 8  
 condensing agent. 9  
 Dwg.2/2

L10 ANSWER 17 OF 33 WPIDS COPYRIGHT 2004 THOMSON DERWENT on STN  
 ACCESSION NUMBER: 2000-194945 [17] WPIDS  
 DOC. NO. CPI: C2000-060366  
 TITLE: Polymer **carriers** for keratinocyte  
 cultivation to cover skin defects e.g. burns,  
 trophic ulcers and bedsores, avoid presence of  
 feeder cells from cultivation system loading  
 immunological system.  
 DERWENT CLASS: A12 A14 A96 B04 D16  
 INVENTOR(S): DVORANKOVA, B; LABSKY, J; SMETANA, K; VACIK, J  
 PATENT ASSIGNEE(S): (UYKA-N) UNIV KARLOVA; (UYKA-N) UNIV KARLOVY 1  
 LEKARSKA FAKULTA; (UYKA-N) UNIV KARLOVY 3 LEKARSKA  
 FAKULTA; (MAKR-N) USTAV MAKROMOLEKULARNI CHEM AVCR;  
 (LEKA-N) LEKARSKA FAKULTA UK  
 COUNTRY COUNT: 82  
 PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 9964563	A1	19991216	(200017)*	EN	30
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC					
MW NL OA PT SD SE SL SZ UG ZW					
W: AL AM AT AU AZ BA BB BG BR BY CA CH CN CU DE DK EE ES FI GB					
GE GH GM HR HU ID IL IS JP KE KG KP KR KZ LC LK LR LS LT LU					
LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ					
TM TR TT UA UG US UZ VN YU ZW					
AU 9940293	A	19991230	(200022)		
CZ 9901946	A3	20010117	(200107)		
CZ 9901947	A3	20010117	(200107)		
CZ 9801803	A3	20011114	(200175)		
CZ 292491	B6	20031015	(200374)		
CZ 292570	B6	20031015	(200374)		
CZ 292883	B6	20031217	(200404)		

## APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 9964563	A1	WO 1999-CZ17	19990609
AU 9940293	A	AU 1999-40293	19990609
CZ 9901946	A3	CZ 1999-1946	19990602
CZ 9901947	A3	CZ 1999-1947	19990602
CZ 9801803	A3	CZ 1998-1803	19980610
CZ 292491	B6	CZ 1999-1946	19990602
CZ 292570	B6	CZ 1999-1947	19990602
CZ 292883	B6	CZ 1998-1803	19980610

## FILING DETAILS:

PATENT NO	KIND	PATENT NO

09/853367

AU 9940293	A Based on	WO 9964563
CZ 292491	B6 Previous Publ.	CZ 9901946
CZ 292570	B6 Previous Publ.	CZ 9901947
CZ 292883	B6 Previous Publ.	CZ 9801803

PRIORITY APPLN. INFO: CZ 1999-1947 19990602; CZ  
1998-1803 19980610; CZ  
1999-1946 19990602

AN 2000-194945 [17] WPIDS

AB WO 9964563 A UPAB: 20000405

NOVELTY - Polymer **carriers** for keratinocyte cultivation prepared by radical polymerization of polymerization mixture containing (weight%): polymerizable monomers (1-95), crosslinker (0-10), initiator (0-10), solvent (0-60), polymerizable saccharide or disaccharide derivatives (0-60), polymerizable sterically hindered amine derivatives (0-50), polymerizable alpha -amino acid derivatives (0-30) or their reactive derivatives.

ACTIVITY - Wound healing; burn healing; ulcer healing; bed sore healing.

USE - Used for cultivation of keratinocytes (claimed) to cover large skin defects such as burns, trophic ulcers and bedsores. Three standard polymer **carriers** and ten test polymer **carriers** were tested for adhesion of human keratinocytes after preincubation with bovine serum in presence of mouse fibroblasts or after adsorption of bioactive saccharides in absence of mouse fibroblasts. Adhesion of four test compounds was better compared with the three standards, although activation of the base using sugars was necessary. Four test **carriers** showed very good keratinocyte cultivation, with keratinocytes adhering and growing without prior pre-incubation with bioactive polysaccharides.

ADVANTAGE - Avoids presence of feeder cells from cultivation system loading patient's immunological system. Does not possess properties that suppress formation of free radicals or reactive oxygen products to healing of affected tissues difficult. Allows application of autologous and allogenic cells to stimulate healing. Immunological loading of patient is lower and process of keratinocyte transplantation is simpler and more effective.  
Dwg.0/0

L10 ANSWER 18 OF 33 MEDLINE on STN DUPLICATE 1  
ACCESSION NUMBER: 1999237026 MEDLINE  
DOCUMENT NUMBER: PubMed ID: 10221837  
TITLE: **Hyaluronic** acid-based polymers as cell **carriers** for tissue-engineered repair of bone and cartilage.  
AUTHOR: Solchaga L A; Dennis J E; Goldberg V M; Caplan A I  
CORPORATE SOURCE: Skeletal Research Center, Department of Biology, Case Western Reserve University, Cleveland, Ohio 44106-7080, USA.  
SOURCE: Journal of orthopaedic research : official publication of the Orthopaedic Research Society, (1999 Mar) 17 (2) 205-13.  
Journal code: 8404726. ISSN: 0736-0266.  
PUB. COUNTRY: United States  
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)  
LANGUAGE: English

Searcher : Shears 571-272-2528

09/853367

FILE SEGMENT: Priority Journals  
ENTRY MONTH: 199905  
ENTRY DATE: Entered STN: 19990601  
Last Updated on STN: 19990601  
Entered Medline: 19990517

AB Culture-expanded bone marrow-derived mesenchymal progenitor cells differentiate into chondrocytes or osteoblasts when implanted subcutaneously in vivo in combination with an appropriate delivery vehicle. This in vivo implantation technique is used to test new materials as putative delivery vehicles in skeletal tissue-engineering models. HYAFF 11 and ACP sponges, two biomaterials based on **hyaluronic** acid modified by esterification of the carboxyl groups of the **glucuronic** acid, were tested as osteogenic or chondrogenic delivery vehicles for rabbit mesenchymal progenitor cells and compared with a well characterized porous calcium phosphate ceramic delivery vehicle. The implant materials were examined by scanning electron microscopy for differences in pore structure or cellular interactions, were quantified for their ability to bind and retain mesenchymal progenitor cells, and were examined histologically for their ability to support osteogenesis and chondrogenesis after subcutaneous implantation into nude mice. The ACP sponge bound the same number of cells as fibronectin-coated ceramic, whereas the HYAFF 11 sponge bound 90% more. When coated with fibronectin, ACP and HYAFF 11 bound, respectively, 100 and 130% more cells than the coated ceramics. HYAFF 11 sponge composites retained their integrity after the 3 or 6-week incubation period in the animals and were processed for histomorphometric analysis. As a result of rapid degradation or resorption in vivo, ACP sponges could not be recovered after implantation and could not be analyzed. HYAFF 11 sponges presented more area available for cell attachment and more available volume for newly formed tissue. Following loading with mesenchymal progenitor cells and implantation, the pores of the sponges contained more bone and cartilage than the pores of ceramic cubes at either time point. Thus, relative to ceramic, HYAFF 11 sponges allow incorporation of twice as many cells and produce a 30% increase in the relative amount of bone and cartilage per unit area. Hence, the **hyaluronic** acid-based delivery vehicles are superior to porous calcium phosphate ceramic with respect to the number of cells loaded per unit volume of implant, and HYAFF 11 sponges are superior to the ceramics with regard to the amount of bone and cartilage formed. Additionally, **hyaluronic** acid-based vehicles have the advantage of degradation/resorption characteristics that allow complete replacement of the implant with newly formed tissue.

L10 ANSWER 19 OF 33 WPIDS COPYRIGHT 2004 THOMSON DERWENT on STN  
ACCESSION NUMBER: 1998-557476 [47] WPIDS  
DOC. NO. NON-CPI: N1998-434531  
DOC. NO. CPI: C1998-166908  
TITLE: Novel sulphated **hyaluronic** acid derivatives - useful as coatings for bio-materials such as catheters, blood bags, syringes, and surgical instruments.  
DERWENT CLASS: A96 B04 D16 D22 P34  
INVENTOR(S): CALLEGARO, L; RENIER, D

Searcher : Shears 571-272-2528